DOCUMENT RESUME

ED 376 625 EC 303 452

AUTHOR Adams, Lois; And Others
TITLE Attention Deficit Disorders: A Handbook for Colorado Educators.
INSTITUTION Colorado State Dept. of Education, Denver. Special Education Services Unit.
PUB DATE 94
NOTE 150p.
AVAILABLE FROM Mountain Plains Regional Resource Center, Utah State University, 1780 North Research Parkway, Suite 12, Logan, UT 84321 ($8.50, includes shipping and handling).
PUB TYPE Guides - Non-Classroom Use (055) -- Books (010)

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS *Attention Deficit Disorders; Early Childhood Education; Educational Needs; Elementary Secondary Education; Eligibility; Guidelines; *Intervention; Medical Services; Parent Participation; Parent School Relationship; Pupil Personnel Services; State Programs; State Standards
IDENTIFIERS *Colorado

ABSTRACT

This handbook is intended to provide Colorado educators with resources to effectively meet the needs of students with attention deficit disorder (ADD). Section 1 (chapters 1-2) presents background information about ADD. Chapter 1 answers general questions about the nature of ADD, its effect on students, and its educational implications. Chapter 2 provides pertinent historical information related to ADD. Section 2 (chapters 3-5) contains suggested policies and procedures to help Colorado districts respond systematically, proactively, and legally to challenges posed by ADD. Chapter 3 is devoted to responses appropriate for young children (ages 3-5); chapter 4 addresses policies and information relevant to grades 1-12, and chapter 5 contains information for educators about the medical management of ADD. Section 3 (chapters 6-8) of the handbook is devoted to the family and health care community resources. Chapter 6 describes the philosophy of the Colorado Department of Education Special Education Services Unit related to developing effective parent-professional partnerships. Chapter 7 provides information from a parent and advocate perspective. Chapter 8 outlines responses involving the health care community. Section 4 (chapters 9-11) presents appropriate intervention strategies. Chapter 9 focuses on strategies for early childhood; chapter 10 contains an instructional framework for grades 1-12; and chapter 11 provides suggestions for the entire school. Finally, Section 5 contains 41 references and other resources about ADD. Appendices offer guidelines for special education evaluation and a listing of Colorado Department of Health clinics. (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 376 625

EC

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

N. Batt

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

EC 303452

Attention Deficit Disorders

cde

Colorado Department of Education

Attention Deficit Disorders

A Handbook for Colorado Educators

Spring, 1994

Special Education Services Unit
303 866-6794

Colorado Department of Education
201 E. Colfax
Denver Colorado 80203

William T. Randall
Commissioner of Education
State of Colorado

Additional copies are available from:

Mountain Plains Regional Resource Center
Utah State University
1780 North Research Parkway Ste. 112
Logan UT 84321
1-800-752-0238

$8.50 (covers shipping and handling)

Graphic Design of This Book and its Cover by John Boak

Attention Deficit Disorders

A Handbook for Colorado Educators

EDITOR AND AUTHOR:

Lois Adams
Consultant, Colorado Department of Education

CONTRIBUTING AUTHORS:

Jane Amundson
Consultant, Colorado Department of Education

K. Kay Cessna
Supervisor, Colorado Department of Education

Victoria Hertel
Nursing Consultant, School Health Services
Colorado Department of Health and
Colorado Department of Education

Jan McNally
Nursing Consultant, Handicapped Children's Services
Colorado Department of Health

Pamela Murray
President of Attention Deficit Disorder Advocacy Group (ADDAG)

Members of the Parent-Professional Forum

Attention Deficit Disorders

A Handbook for Colorado Educators

	Acknowledgments	v
	Foreword	ix
	Introduction	xi
SECTION I	An Overview	1
Chapter 1	Answers to Questions about ADD	3
Chapter 2	History of Policies Related to ADD	21
SECTION II	Suggested Policies & Procedures for School Districts	31
Chapter 3	Schools' Responsibility for Young Children with ADD	33
Chapter 4	Schools' Responsibility for Students with ADD Ages 6 to 21 Years	43
Chapter 5	Schools' Responsibility for Medical Management	57
SECTION III:	Family and Health Care Resources	67
Chapter 6	The Parent-Professional Partnership	69
Chapter 7	Understanding and Working with the Families of Children with ADD	77
Chapter 8	Health Care Resources	89
SECTION IV:	Intervention Strategies	95
Chapter 9	Interventions for Young Children (Ages 3-5)	97
Chapter 10	Interventions for Students in Grades One through 12	115
Chapter 11	Systems Interventions for Schools	129
SECTION V:	Additional Resources	133
Appendix A	Guidelines for Identification For Special Education	139
Appendix B	Colorado Department of Health County Nursing Service	147

Attention Deficit Disorders

A Handbook for Colorado Educators

ACKNOWLEDGMENTS

We at the Colorado Department of Education appreciate the help of many individuals and organizations in the preparation of this document. The following groups contributed significantly through their feedback, suggestions, and/or concept development:

- Colorado Department of Education ADD Instructional Strategies Committee
- Colorado Department of Education Early Childhood ADD Committee
- Colorado Departments of Health/Education Joint ADD Committee
- Colorado Society of School Psychologists
- Colorado Special Education Directors
- Special Education Administrative Units throughout Colorado
- The Parent-Professional Partnership

We gratefully acknowledge the assistance of several knowledgeable people. First, Pamela Murray, the founder and president of Attention Deficit Disorder Advocacy Group (ADDAG), a support group in Colorado for families affected by ADD, is the author of the chapter entitled "Understanding and Working with Parents of Children with Attention Deficit Disorder." Her helpful contribution is appreciated. Second, Steven Forness, Ph.D., Neuropsychiatric Hospital, University of California, kindly and patiently reviewed the manuscript and provided helpful suggestions and background information. Third, Susan Thornton edited the manuscript with scrupulous attention to every detail. Finally, we appreciate the design work of John Boak, who took the diverse materials of this book and united them into a visual whole. Thanks to all who shared their expertise and their time!

Contributors

The following people contributed considerable time in developing concepts and providing information for this book.

Colorado Department of Education ADD Instructional Strategies Committee

Lois Adams, Consultant, Colorado Department of Education
Dennis Hamonn, Teacher, Littleton Public Schools
Bridget Matthews, Teacher, Adams County District 12
Cristine McNamara, Teacher, Adams County District 50
Rosemary Peterson, Psychologist, Jefferson County R-1
Patricia Stevens, Teacher, Rio Blanco BOCES and Meeker RE-1 District
Patricia Tomlan, Consultant, PST Consultants, Littleton
Mary Van Allen, Teacher, Boulder Valley Schools

Colorado Department of Education Early Childhood ADD Committee

Jane L. Amundson, Consultant, Colorado Department of Education
Frank Fielden, Consultant, Colorado Department of Education
Catherine Healy-Hofmann, Early Childhood Special Educator, Fort Collins Public Schools
Nancy Miller, Child Find Coordinator, Boulder Valley Public Schools
Pam Parker-Martin, Psychologist, Douglas County Public Schools
Theresa Schrotberger, Early Childhood/Special Educator, Cherry Creek Public Schools
Debra Stover, Parent Consultant, Colorado Springs

Colorado Department of Health/Department of Education Joint Committee on ADD

Lois Adams, Consultant, Colorado Department of Education
Jane Amundson, Consultant, Colorado Department of Education
Elna Cain, Nursing Consultant, Child Health Services, Colorado Department of Health
Kay Cessna, Supervisor, Colorado Department of Education
Victoria Hertel, Nursing Consultant, School Health Services, Colorado Department of Health and Colorado Department of Education
Cherie Lovejoy, Parent Representative, Colorado Department of Health

Robert McCurdy, M.D., Medical Affairs Office, Family Community Health Services, Colorado Department of Health
Jan McNally, Nursing Consultant, Handicapped Children's Services, Colorado Department of Health
Jan Silverstein, Senior Consultant, Colorado Department of Education
Mary Van Allen, Parent Representative, Colorado Department of Education

COLORADO SOCIETY OF SCHOOL PSYCHOLOGISTS ADD COMMITTEE

Jan Cantrill, Psychologist, Cherry Creek Schools
Nancy Lawton, Psychologist, Denver Public Schools
Chris Mason, Behavioral Consultant, Cherry Creek Schools
Jonelle Neighbor, Psychologist, Academy School District 20
Rosemary Peterson, Psychologist, Jefferson County Schools
Myron Swize, Supervisor, Colorado Department of Education
Victoria Temple, Psychologist, Cherry Creek Schools
Christine Woods de Real, Psychologist, Jefferson County Schools

THE PARENT-PROFESSIONAL FORUM

Deb Browe., Mountain Plains Regional Resource Center, Des Moines, Iowa
Cyndy Bird, Parent, Coordinator of PEP, Castle Rock
Ann Clement, Principal, Douglas County Schools
Shari Dawson-Sjerven, Parent, Effective Parent Project, Grand Junction
Romie Grebenc, Parent, Northeast Colorado Parent Center, Fort Collins
Sharon Harris, Parent, Metro Partnership Project, Aurora
Judy Martz, Parent, Parent Education and Assistance for Kids (PEAK), Colorado Springs
Bob Mullen, Superintendent, Rangely Schools
Susan McAlonan, Senior Consultant, Special Education Services Unit
Buck Schrotberger, Senior Consultant, Special Education Services Unit

Foreword

In mid-1991, a joint memorandum was issued by the Office of Special Education and Rehabilitative Services, the Office of Civil Rights, and the Office of Elementary and Secondary Education. The intent of the memorandum was to clarify certain state and local responsibilities for addressing the needs of children with Attention Deficit Disorders (ADD). The memorandum triggered activity within each of the states and territories as they attempted to deal with the increase in referrals and assessments that was expected. In addition to preparing the State Board of Education and local directors of special education for what might happen, the Special Education Services Unit (SESU) of the Colorado Department of Education (CDE) assigned two persons to begin working on a handbook which would provide valuable information to local service providers, parents of children with ADD and the children themselves.

Although the handbook was one and one-half years in development, I find after reviewing it, that it was worth the wait. Lois Adams and Kay Cessna of the SESU, working with a good cross-section of interested persons within Colorado and with help from outside the state as well, have developed an exceptional work. In SESU's typical fashion, they have collaborated with parents and professionals to produce a most complete and helpful handbook.

Fred Smokoski, Director
Special Education

Introduction

s educators in the 1990s, we find ourselves responsible for meeting the needs of an increasingly diverse student population. Students who have attending difficulties in school present a particular challenge because they are at risk for academic and social failure if appropriate support and instruction are not provided. Many of these students have been identified as having an Attention Deficit Disorder (ADD).[1] Other students have attention difficulties very similar to students with ADD, but have not been identified as having this condition and have similar needs as those who have been labeled.

Students with ADD-related problems are often frustrating to, and usually frustrated by, the educational system. This handbook is written to provide resources to effectively meet the needs of students with ADD. The five sections provide information to help understand the nature of ADD and the context in which it exists, to develop the policies and procedures which schools need to have in place, to access health care and family connections, to develop intervention strategies, and to obtain additional information. This book is written so that sections or chapters may be read independently if the reader has a special interest in any one aspect.

Section I presents background information about ADD. Chapter 1 answers general questions about the nature of ADD, its effect on students, and its educational implications. Chapter 2 provides pertinent historical information related to ADD.

Section II contains suggested policies and procedures to help districts in Colorado respond systematically, proactively, and legally to the challenges presented by ADD. This section contains three chapters: Chapter 3 is devoted to responses appropriate for young children (ages 3-5), Chapter 4 addresses policies and information relevant to the first through twelfth grades, and Chapter 5 contains information for educators about the medical management of ADD.

Section III of this handbook is devoted to the family and health care community resources so important when a student has ADD. Chapter 6 describes the philosophy of the Colorado Department of Education Special Education Services Unit related to developing effective parent-professional partnerships. Chapter 7 provides thought-provoking and helpful

information from a parent and advocate perspective. Chapter 8 outlines responses that involve the health care community.

Section IV presents strategies and concepts to help educators and others provide appropriate interventions. Chapter 9 focuses on strategies and concepts for early childhood, ages three through five. Chapter 10 contains an instructional framework and ideas for grades one through twelve. Chapter 11 provides suggestions for use by the entire school.

Finally, Section V lists additional resources about ADD.

This book is written with the belief that we do have the resources and skills in Colorado to meet the needs of students with ADD effectively and efficiently. The goal is to provide information to increase understanding of students with ADD and improve coordination of services among educators, health care providers, and families. It is dedicated to helping students with ADD be successful, productive, confident individuals.

1. The term Attention Deficit Disorder (ADD) is used in this book as a generic term for Attention Deficit Hyperactivity Disorder (ADHD), Undifferentiated Attention Deficit Disorder (UADD), or other terms used for various types of Attention Deficit Disorders.

SECTION I

An Overview

ttention Deficit Disorder (ADD) is a somewhat controversial condition. Although there is general agreement that ADD exists, "scientists, doctors, and researchers are still not sure how to define it, how to diagnose it, or what causes it" (Aleman, 1991, p. 13). In addition, there is discussion in the political arena about how to best meet the needs of students with ADD in the schools (Aleman, 1991).

In order for schools to respond effectively and systematically to the needs of students who have ADD it is necessary to consider what is known about the condition, including what it is, what causes it, and what kind of things help students with ADD. It is also helpful to understand the historic and political contexts surrounding ADD. Thus, this section begins with a chapter that answers several questions about the nature of ADD. The second chapter briefly discusses ADD's historical and political contexts.

CHAPTER 1

Answers to Questions About ADD

Before we can develop effective strategies and responses for our students with Attention Deficit Disorder, it is important to understand something about it. This chapter provides information to answer questions commonly asked by educators.

What is ADD?

Although ADD is usually considered a condition that is internal to an individual, there are currently no specific criteria or measures of what happens internally that causes the condition. Therefore, it is difficult to explain exactly what ADD is. For instance, ADD is not like high blood pressure, in which the condition is defined by a range of specific blood pressure readings. Instead, ADD, is defined by describing the external or behavioral manifestations of the condition.

The definition of ADD most commonly used until now appears in the American Psychiatric Association's 1987 *Diagnostic and Statistical Manual of Mental Disorders* (DSM III-R). However, a new version of this manual (DSM-IV) is currently being prepared that contains a slightly different orientation. It is likely that it will become the new description used by most professionals when they refer to ADD. Figure 1-1 contains the latest information on the DSM-IV description of ADD available when this book went to press.

The DSM-IV identifies three subtypes of ADHD:
1) Predominantly Inattentive Type,
2) Predominantly Hyperactive - Impulsive Type, and
3) Combined Type.

Considerable efforts have gone into developing the reliability and validity of the DSM-IV ADHD diagnosis. The diagnostic criteria were based on their predictive validity for educational difficulties, particularly in the areas of academic productivity and accuracy. Thus, the new criteria hold promise of providing a more helpful framework for educators (McBurnett, Lahey & Pfiffner, 1993).

FIGURE 1-1

DSM-IV Proposed Criteria for Attention Deficit Hyperactivity Disorder

(Draft, August, 1993)

A. Either (1) or (2)

1. Inattention: At least six of the following symptoms of inattention have persisted for at least six months to a degree that is maladaptive and inconsistent with developmental level:

a. often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities

b. often has difficulty sustaining attention in tasks or play activities

c. often does not seem to listen to what is being said to him or her

d. often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions)

e. often has difficulties organizing tasks and activities

f. often avoids, expresses reluctance about, or has difficulties engaging in tasks that require sustained mental effort (such as schoolwork or homework)

g. often loses things necessary for tasks or activities (e.g., school assignments, pencils, books, tools, or toys)

h. is often easily distracted by extraneous stimuli

i. often forgetful in daily activities.

2. Hyperactivity-Impulsivity: At least five of the following symptoms of hyperactivity-impulsivity have persisted for at least six months to a degree that is maladaptive and inconsistent with developmental level:

Hyperactivity

a. often fidgets with hands or feet or squirms in seat

b. leaves seat in classroom or in other situations in which remaining seated is expected

c. often runs about or climbs excessively in situations where it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)

d. often has difficulty playing or engaging in leisure activities quietly

e. is always "on the go" or acts as if "driven by a motor"

f. often talks excessively

Impulsivity

g. often blurts out answers to questions before the questions have been completed

h. often has difficulty waiting in lines or awaiting turn in games or group situations

i. often interrupts or intrudes on others (e.g., butts into others' conversations or games)

B. Some symptoms that caused impairment were present before age seven.

C. Some symptoms that cause impairment are present in two or more settings (e.g., at school, work, and at home).

D. There must be clear evidence of clinically significant impairment in social, academic, or occupational functioning.

E. Does not occur exclusively during the course of a Pervasive Developmental Disorder, Schizophrenia or other Psychotic Disorder, and is not better accounted for by a Mood Disorder, Anxiety Disorder, or a Personality Disorder.

Diagnostic and Statistical Manual (Volume IV), Draft, August 1993, per American Psychiatric Association

FIGURE 1-2

ADD as Defined by the Professional Group for ADD and Related Disorders

The condition 'attention deficit disorder' refers to a developmental disorder involving one or more of the basic cognitive processes related to orienting, focusing, or maintaining attention, resulting in a marked degree of inadequate attention to academic and social tasks. The disorder may also include verbal or motor impulsivity and excessive non-task-related activities such as fidgeting or restlessness. The inattentive behavior of ADD most commonly has onset in early childhood, remains inappropriate for age, and persists throughout development.

ADD adversely affects educational performance to the extent that a significant discrepancy exists between a child's intellectual ability and that child's productivity with respect to listening, following directions, planning, organizing, or completing academic assignments which require reading, writing, spelling, or mathematical calculations.

Inattentive behaviors, if caused by cultural differences, socioeconomic disadvantage, or lack of adequate exposure to the language of educational instruction, are not evidence of ADD. Inattentive behaviors with acute onset are not evidence of ADD if they arise directly from (1) stressful events associated with family functioning (e.g., parental divorce, or the death of a family member or close friend) or environmental disruption (e.g., a change in residence or school); (2) post-traumatic stress reactions caused by abuse (e.g., physical, psychological, or sexual) or natural disasters; (3) noncompliance due solely to opposition or defiance; (4) frustration resulting from inappropriate tasks beyond intellectual ability or level of achievement skills; or (5) emotional disorders (e.g., anxiety, depression, schizophrenia).

ADD can co-exist with other handicapping conditions (i.e., specific learning disabilities, serious emotional disturbance, or mental retardation).

Professional Group for ADD and Related Disorders, 1991, p. 5.

Both the DSM-IIIR and the DSM-IV focus primarily on the *behavioral* component of ADD. An alternative definition has been developed which focuses on the *cognitive processes* that are affected when a student has ADD and considers the educational and social implications of ADD (Figure 1-2).

Taken together, these two definitions provide a useful framework for those of us in schools. They emphasize that ADD affects both *behavior* and *thought*, and impact the development of both *academic* and *social skills*.

Based on these two definitions, it is important for school staff to consider the following elements when they suspect that a student may have ADD:

1. The disorder is developmental.
This means that it begins before the age of seven. Often parents describe their child with ADD as having been unusually active as a very young child, needing constant supervision and requiring much energy on the part of caregivers.

2. It is a chronic, long-term condition and not one that is acutely acquired.
ADD persists throughout childhood and beyond. Unfortunately, this implies that it may not be completely outgrown.

3. The hallmark trait is an inability to attend.
This is present to a marked degree and is developmentally inappropriate. Compared to their peers, students with ADD may have difficulty attending to material and listening to directions. They frequently fail to spend the required time to complete assignments.

4. There may be a marked degree of developmentally inappropriate impulsivity.
The main factor associated with impulsivity is the inability to think before acting. This may lead to difficulty in inhibiting responses, delaying gratification, or following rules — all behaviors that lead to problems in school.

5. There may be a marked degree of developmentally inappropriate overactivity.
Compared to their peers, many students with ADD are described as overly fidgety, restless, and exhibiting inappropriate levels of motor activity when presented with a task.

Although hyperactivity is a common characteristic of ADD, it is not always present. Students who are hyperactive usually demand a great deal o attention and so are often identified by teachers as possibly having ADD. However, the inability to attend is sometimes accompanied by withdrawn behaviors. Although they sit quietly at their desks, children with attending problems without hyperactivity are also unable to pay attention. They, too, may fall behind in school and/or have difficulty with social relationships. Children with this type of ADD often go unnoticed, yet the effects of the attention problems may be just as devastating.

6. ADD is pervasive.
Characteristics of the disability will be present in a wide variety of situations. However, they may be most apparent at school, where students experience increased structure and greater expectations for performance and behavior.

7. ADD may result in a production deficit rather than an acquisition deficit.
Students with ADD may have more difficulty actually completing an assignment or a project than in acquiring the knowledge to do it. Thus, a student may know how to do a math problem or may understand a story, but find it difficult to complete the math or reading assignment to demonstrate their knowledge.

8. ADD is not caused by environmental situations or other conditions such as emotional disturbance, mental retardation, or sensory, language, or motor impairments.
Attention problems may be present with these other conditions but they are a by-product of the condition, not its cause. In such cases it may be more appropriate to consider the primary condition first when developing educational responses.

9. It is rather common for some students with ADD to have associated disabilities such as conduct disorder, clinical depression, anxiety disorders, or learning disabilities.
It is very important to consider these disorders in planning collaborative interventions. (Dykman and Ackerman, 1993; Forness, Kavale, King, and Kasari, in press.)

What causes ADD?

No one knows for sure what causes ADD. However, differences in brain structure/function and heredity are being studied. It currently appears highly likely that many — though certainly not all — students with ADD have symptoms that reflect neurological dysfunction. Recent research findings indicate that there are both specific brain regions (the frontal lobe) and functional systems (lowered metabolic activity) associated with ADD (Hynd, Hern, Voeller, & Marshall, 1991). Genetic and prenatal factors are being considered as possible causes for the neurological dysfunctions.

Popular theories that vitamin deficiencies or allergies to certain foods or additives cause ADD have not been supported by research.

Who decides if a student has ADD and how do they know?

The DSM definitions of ADD do not specify who is responsible for determining whether a student has ADD. This is an area of controversy, for some believe it is a medical condition requiring a physician's examination (Hudson, 1989; Silver, 1990), while others believe it to be a mental health issue requiring the decision of a psychiatrist or psychologist (Schaughency & Rothlind, 1991). Still others believe that a transdisciplinary team of educators and mental health professionals associated with the schools may determine if a child has ADD. The Professional Group for ADD and Related Disorders, for instance, recommends that instructional and support personnel who currently evaluate students for eligibility for special education can conduct appropriate assessments of students with attention problems to determine whether they may have ADD and are eligible for special education services. In Colorado, for the purposes of determining a student's eligibility for special education services, it is not necessary to have a medical or mental health diagnosis of ADD. (See Section II, Chapters 3 and 4 for a fuller explanation.)

Unfortunately, there is no single test that gives a definite answer as to who has ADD. In fact, the diagnosis of ADD probably should be considered a "best-estimate diagnosis" based on information from multiple sources (Schaughency & Rothlind, 1991). To arrive at a best-estimate diagnosis, information should be gathered from interviews with the student, family members, and teachers, from behavior checklists completed

by family members and teachers, from student observations across several settings, from work samples, and from the student's medical history. In addition, when carefully used and interpreted, tests of cognitive and academic functioning are helpful instruments.

How many students have ADD?

It is very difficult to know exactly how many students have ADD. The lack of any specific tests that allow a positive diagnosis, the rather broad definitions of ADD, and ADD's similarity to other disabilities make determining prevalence a "loose science" at best. There is some agreement, however, that from three to five percent of the population may have ADD. That's between 1.35 and 2.5 million children (*CEC Draft ADD Report*, 1992). This means that ADD is one of the most common neurologically based disorders. It also means that since most classrooms in Colorado have approximately 25 to 30 students, it could be expected that there would be at least one student with an attention deficit per classroom, while in fact, many classrooms have several. In an elementary school of 400 students, there may be 12 or more students with this condition.

What are students with ADD like in school?

One student in a class or 12 in a school may not sound like very many until we consider the nature of the difficulties ADD can cause. Three hallmark characteristics of ADD are: 1) difficulty sustaining attention, 2) excessive verbal and motor activity, and 3) impulsivity or the inability to withhold active responses (Zentall, 1993). Because school settings are usually somewhat structured and academic situations often carry expectations that students will perform, the effects of ADD will probably be more pronounced in school than most other settings.

School-aged students with ADD typically have difficulty maintaining a steady flow of mental energy. They do things like move around, squirm, and fidget a lot, or they are easily tired and often withdrawn. Teachers may hear them say, "My brain is tired," or "I can't sit still and think at the same time."

These students have problems selecting significant critical features from the environment. They are easily distracted and overwhelmed. They are often heard lamenting, "I can't decide," "What should I do?" or "There are so many things going on in my head!"

Planning is often an almost impossible task for students with ADD. They act before thinking, tend to be disorganized, blurt out, interrupt, and fail to finish what is started. They say things like, "I did it by accident," or "I can't find it." Students who have difficulty planning are also less likely to ask for help.

When a student must constantly divert energy from learning to inhibit a behavior, there can be serious implications (Zentall, 1993). As a result, students with ADD may have difficulty acquiring rote skills that form a basis for higher level thinking.

Because students have difficulty focusing attention, they often find it hard to monitor what they're doing. They may be unaware of their mistakes, tend to engage in dangerous activities without considering the consequences, make frequent social faux pax, and do not realize when they've been inappropriate. They frequently are heard to say things like, "My brain just didn't kick in," or "But I thought I had an 'A' not a 'D'!" Students who have difficulty monitoring their behavior often fail to read or follow directions.

Finally, a devastating characteristic of ADD is the inability to learn from experience, feedback, rewards, and consequences. It's common to hear students with ADD say, "It's not fair!", "I didn't mean to do it!", "It just happened!", or "I don't know why I did that again."

It's important for school personnel not to be consumed with the negative effects of ADD. Researchers have also documented positive attributes of students with ADD. For instance, in spoken language, students with ADD show greater creativity in their stories than their classmates (Zentall, 1993). The challenge for educators is to develop effective strategies and accommodations so that students with ADD can tap their strengths to become creative, spontaneous, and successful participants in their classes and their communities.

How does ADD affect young children?

Very young children (up through age five) may have many of the difficulties just described because they have not developed the cognitive or emotional skills to make choices, to plan and carry out activities, or to self-monitor and modify their thinking and behavior. They may seem impulsive, inattentive, and overactive at times. This is normal

for young children, who should not be expected to have sophisticated attending skills.

Young children with ADD, however, go far beyond what one would identify as developmentally appropriate behavior. They are often described as much more "challenging" than their peers. These youngsters appear to be driven by a boundless energy as they change from one activity to another, leaving behind partially completed projects. Frequently, children with ADD do not seem to hear what is said to them and are unable to follow directions. They may interrupt other children and attempt to dominate play groups as they seek attention of adults and their peers. As a result, they often have difficulty relating to other children.

Behaviors associated with ADD are often noticeable from birth. Parents frequently report a history of colic, poor eating patterns, and sleeping problems (Jones, 1991).

It is important to remember that many young children may have some of the problems associated with ADD at some time in their development. ADD should not be suspected unless a child has many of these behaviors, they occur in several situations, and they are present to a marked degree as compared to peers. The symptoms of attention problems in young children are more overt, more intense, and more serious than age-appropriate behaviors (Jones, 1991).

What do we know about how students with ADD do in school?

With the types of difficulties students with ADD have, it is no surprise that statistics indicate that students with ADD are often unsuccessful in school.

One major eight-year study followed 189 children, ages 4 to 12 years, into adolescence (Barkley, Fischer, Edelbrock, & Smallish, 1990). The results of the study showed that of the 123 young people with ADD in the study:

▼ 30 percent had been retained in a grade at least once, with many retained more than once;

▼ 46 percent had been suspended, often more than once;

▼ 11 percent had been expelled; and
▼ 10 percent had dropped out of school.

Studies that have followed children with ADD into adulthood found that:
▼ more than 50 percent had been retained in a grade at least once;
▼ 35 percent never completed a high school education; and
▼ only 5 percent completed college
(cited in Fowler, 1992, p. 8).

Other follow-up studies of children with ADD also present a picture of serious academic failure (Professional Group for ADD, 1991). These findings demonstrate that ADD may be a condition with serious ramifications. Taken together, they point to the need for increased understanding and more effective responses from educators.

The good news is that we are learning more all the time about what strategies, techniques, and treatment work. There is evidence that systematic school interventions, in combination with family and health care interventions, do make a difference (Satterfield, Satterfield, & Shell, 1987). Sections IV and V of this manual contain many suggestions and other references that have proven helpful for students with ADD.

Does medication help?

Medication (usually a central nervous system stimulant prescribed by a physician) has been a popular and common treatment for ADD for the last 20 years, and there is a great deal of support for its use. A common view is that medication may help from 70 to 80 percent of those treated (Barkley, 1990; Hudson, 1991). Numerous studies with school-age children indicate that medication is related to a decrease in disruptive and daydreaming behavior, an increase in academic productivity and accuracy, and an improvement in teacher ratings.

In addition to knowing about the benefits of medication, it is also important to consider the limitations of stimulant medications.

First, medication has only a limited educational benefit. A review of the research indicates that the "major effect of stimulants appears to be an improvement in classroom manageability rather than academic performance" (Barkley & Cunningham, 1978, p. 85). For instance, the number

of students helped by medication may be considerably smaller when complex academic tasks such as reading comprehension are used to determine response to medication (Forness, et al., 1992). In addition, the short-term effects of stimulants on academic performance are minimal compared to the effects on behavior (Swanson, et al., 1992).

Medication does not cure ADD and it should never be used as an isolated treatment nor thought of as the solution to all the problems related to ADD. The message is not to over-rely on medications or postpone non-pharmacological interventions such as social skill training, organization and learning strategies, and behavior modification (Satterfield, et al.,1987).

A second limitation of medication is that there may be side effects. These include decreased appetite, difficulty falling asleep, headaches, stomachaches, dizziness, mild irritability, drowsiness, and social withdrawal. Therefore, *any time a student is treated with medication, there must be careful follow-up through periodic contact with the physician and careful monitoring of the child's behavior to observe the effects and possible side-effects of the medication.*

In many cases, stimulant medication is an integral part of the multimodal treatment for students with ADD. Educators are essential members of the multimodal team and play an important role when students are on medication. Section II, Chapter 3, contains more information about medications and the school's role in the medical management of students with ADD.

Will changing the environment help?

Although ADD is not caused by environmental factors, several situational/task variables have been identified that affect the severity of symptoms. Figure 1-3 lists common situations in which students with ADD may appear more or less like their peers. *From this figure it is evident that educators can carefully structure a student's day to reduce the negative effects of ADD.*

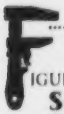


FIGURE 1-3
Situational/Task Variables That Affect Symptom Severity

Decreased Symptoms: More Like Normal Peers	Increased Symptoms: Less Functional Behavior
■ One-to-one	■ Group situations
■ Novel situations/tasks	■ Familiar situations/tasks
■ Frequent feedback	■ Infrequent feedback
■ Immediate consequences	■ Delayed consequences
■ Noticeable consequences	■ Less obvious consequences
■ Early day	■ Late in the day
■ Supervised work	■ Unsupervised work

Adapted from Barkley, R. A. (1990). Professional development workshop, Child Psychology Seminars, Portland, OR.

What is the best way to meet the needs of students with ADD?

ADD may impact every facet of a student's life, and its long-term effect can be devastating. Thus, there is a need to utilize help from a wide network of people. Family members, educators, and health care professionals must work collaboratively to provide necessary support and maximize the positive effects of interventions. Many professionals and ADD organizations refer to this collaborative effort as a "multimodal" approach. (Section III contains information helpful to schools in developing collaborative relationships.)

It's estimated that the vast majority of students with ADD are able to succeed in the regular classroom when they have the necessary level of support (Professional Group for ADD and Related Disorders, 1991). There are many classroom strategies that do not cost money or take much time that have proven especially effective for students with ADD. Section IV contains a model that offers specific suggestions for curriculum and instruction.

Some students with ADD need specialized instruction related to academic or behavioral difficulties. These students may need direct instruction individually or in small groups that is specifically tailored to teach certain academic or social skills. They may also need specifically designed behavior modification programs and/or counseling. Educators with expertise in these areas should be available to help design and provide such services.

The following interventions (Jones, 1991) are known to be especially successful with students with ADD:

1. Social skills training,

2. Parent training and support,

3. Physical activities (often a noncompetitive sport) and hobbies in which the student can be successful,

4. Behavioral interventions (behavior modification, cognitive behavior training),

5. Medication, and

6. Educational interventions (see Section IV).

In addition, systematic instruction that teaches students learning strategies and self-monitoring and self-regulating skills hold promise (Forness & Walker, 1992).

What are the most important things for educators to keep in mind?

Although there is still some controversy surrounding ADD and there is certainly much more to learn, there currently appears to be widespread agreement about these points:

1. ADD is a condition that is first manifested when students are young, and that often persists throughout life.

2. The condition affects both cognition and behavior, resulting in academic and social difficulties.

3. There is growing evidence of a neurologic correlate to ADD, supporting the fact that students with ADD often are not able to control their behavior or manage their learning.

4. Some environmental factors significantly influence the behavior of students with ADD, although they do not cause or cure the disorder.

5. Successful interventions require a collaborative problem-solving approach by a team that should include educators, family members, heath care providers, and when appropriate, the student.

6. Schools need to be flexible in providing educational responses that are individually tailored to meet specific needs.

The guidelines and recommendations included in this handbook reflect these important conclusions.

References

Aleman, S. R. (1991). *CS report for Congress: Special education for children with attention deficit disorder: Current issues*. Washington, DC: Congressional Research Service, The Library of Congress.

Barkley, R. A. (1990). *Attention-deficit Hyperactivity Disorder: A manual for diagnosis and treatment*. New York: Guilford.

Barkley, R. A., & Cunningham, C. E. (1978). Do stimulant drugs improve the academic performance of hyperkinetic children? *Clinical Pediatrics, 8*, 137-146.

Barkley, R. A., Fischer, M., Edelbrock, C. S., & Smallish, L. (1990). The adolescent outcome of hyperactive children diagnosed by research criteria: I. An 8-year prospective follow-up study. *American Academy of Child & Adolescent Psychiatry, 29*(4), 546-557.

CEC draft ADD report. (1992). Reston, VA: Council for Exceptional Children.

Diagnostic and statistical manual of mental disorders (IIIR). (1987). Washington, DC: American Psychiatric Association.

Diagnostic and statistical manual of mental disorders (IV) Draft Outline. (1993). Washington, DC: American Psychiatric Association.

Dykman, R. A., & Ackerman, P. T. (1993). Behavioral subtypes of Attention Deficit Disorder. *Exceptional Children, 60*, 125-131.

Forness, S. R., Swanson, J.M., Cantwell, D.P., Guthrie, D., & Sena, R. (1992). Response to stimulant medication across six measures of school-related performance in children with ADHD and disruptive behavior. *Behavioral Disorders, 18*, (1), 42-53.

Forness, S. R., & Walker, H. M. (1992). *Special education and children with ADD/ADHD*. NADDA Monograph Series. Publication Number 110. National Attention Deficit Disorder Association.

Forness, S. R., Kavale, K. A., King, B. H., & Kasari, C. (in press). Simple versus complex conduct disorders: Identification and phenomenology. *Behavioral Disorders*.

Fowler, M. (1992). *CH.A.D.D. educators manual*. Fairfax, VA: CH.A.D.D.

Hudson, M. (1989). The physician's role in the multimodal treatment of attention deficit hyperactivity disorder. *ADD-VANCE*, I(1), 1.

Hudson, M. J. (1991). *The use of medicine with Attention Deficit Hyperactivity Disorder*. Wheat Ridge, CO.

Hynd, G., Hern, K., Voeller, K., & Marshall, R. (1991). Neurobiological basis of Attention Deficit Hyperactivity Disorder (ADHD). *School Psychology Review, 20* (2), 174-186.

Jones, C. B. (1991). *Sourcebook for children with Attention Deficit Disorder. A management guide for early childhood professionals and parents*. Tucson, AZ: Communication Skill Builders.

McBurnett, K., Lahey, B. B., & Pfiffner, L. J. (1993). Diagnosis of Attention Deficit Disorders in DSM-IV: Scientific basis and implications for education. *Exceptional Children, 60*, 108-177.

Professional Group for ADD and Related Disorders. (1991). *Response to the ADD notice of inquiry.* Scarsdale, NY: PGARD.

Proposed guidelines for school districts for identifying and testing children with Attention Deficit Disorder and a proposed program for providing appropriate services. (1991). Austin: Texas Education Agency.

Satterfield, J. H., Hoppe, C. M., & Schell, A. M. (1982). A prospective study of delinquency in 110 adolescent boys with attention deficit disorder and 88 normal adolescent boys. *American Journal of Psychiatry, 139,* 795-798.

Satterfield, J. H., Satterfield, B. T., & Shell, A. M. (1987). Therapeutic interventions to prevent delinquency in hyperactive boys. *Journal of the American Academy of Child and Adolescent Psychiatry, 26,* 56-64.

Schaughency, E. A., & Rothlind, J. (1991). Assessment and classification of Attention Deficit Hyperactive Disorders. *School Psychology Review, 20* (2), 187-202.

Silver, L. B. (1990). *ADHD. Attention Deficit-Hyperactivity Disorder and Learning Disabilities. Booklet for the Classroom Teacher.* Summit, NJ: CIBA-GEIGY.

Swanson, J. M., Cantwell, D., Lerner, M., McBurnett, K., Pfiffner, L., & Kotkin, R. (1992). Treatment of ADHD: Beyond medication. *Beyond Behavior, 4* (1), 13-22.

Zentall, S. (1993). Research on the educational implications of Attention Deficit Hyperactivity Disorder. *Exceptional Children, 64* (2), 143-153.

CHAPTER 2

History of Policies Related to ADD

In the preceding chapter of this section we considered information about what ADD is, how it affects students, and how it may be treated. The emphasis was on the student. This chapter considers the historical and political contexts which surround ADD. It answers the questions: Where did this all begin?, Where are we now in terms of policies and legal issues?, and How did we get there?

Where did this all begin?

Recent policy decisions, scientific discoveries, and interest from the media have led to a heightened awareness of ADD. However, it is important to remember that ADD is not a new condition. Although the name has changed often since it was first described, the changes in nomenclature reflect an increased understanding of the disorder and an attempt to formulate a more precise definition (Teeter, 1991).

In the 1800s, researchers identified hyperactive and inattentive behaviors in patients recovering from serious brain traumas. It wasn't until 1902, however, that a researcher, G.F. Still, first described a childhood disorder which included inattention, impulsivity, and difficulty in benefiting from life experiences. The disorder was referred to as a "Defect in Moral Control." Dr. Still observed that this condition tended to occur more often in males than females and that it was probably related to heredity, trauma, and learning history. He did not offer much hope for treating the disorder, feeling there was little that could be done to remediate the associated behaviors (Goldstein & Goldstein, 1992).

After an outbreak of encephalitis in the early 1900s many children who had that disease were found to be restless, impulsive, and overactive. Thus, the theory of a link between hyperactivity-inattention and neurologic dysfunction emerged. This theory continued through the 1950s, with the disorder referred to as Minimal Brain Dysfunction (MBD).

As evidence mounted that children with MBD did not have hard signs of structural brain damage, the focus switched from internal causation to behavioral manifestations. Motor activity levels of hyperactive children

were the primary focus during this period, with the disorder being referred to as Hyperactivity.

In the 1970s, as research methods became more sophisticated, there was a growing realization that the primary problem may be inattention, not overactivity. With the publication of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* in 1980, the condition was termed Attention Deficit Disorder. The term contained two subtypes: Attention Deficit with Hyperactivity and Attention Deficit Disorder without Hyperactivity. However, continuing confusion and conflict led to a further change in 1987, when the DSM-IIIR replaced the term Attention Deficit Disorder with Attention Deficit Hyperactivity Disorder. Undifferentiated Attention Deficit Disorder, a category which requires minimal diagnostic criteria, also was added at this time.

Today most children are labeled as having Attention Deficit Hyperactivity Disorder. However, even though few criteria exist, some children are identified as having Undifferentiated Attention Deficit Disorder (Aleman, 1991). In addition, the term Attention Deficit Disorder without Hyperactivity is also still used as diagnostic label.

To make matters even more unsettling, DSM-IV, which is scheduled for publication in the spring of 1994, changes terminology yet one more time. The new nomenclature is Attention-deficit/Hyperactivity Disorder. It will contain three subtypes:

- Attention-deficit/Hyperactivity Disorder, Predominantly Inattentive Type,
- Attention-deficit Hyperactivity Disorder, Predominantly Hyperactive-Impulsive Type, and
- Attention Deficit Hyperactivity, Combined Type.

Thus, we can expect that the labeling issue will continue to be confusing.

Currently, ADD is being studied from many perspectives. Researchers are focusing on the cognitive, motivational, and social difficulties associated with ADD (Frick & Lahey, 1991; Goldstein & Goldstein, 1992; Levine, 1992). The role of pharmaceutical treatment is being expanded and carefully analyzed (Swanson et al., 1992). Genetic and/or neurological studies are providing accumulating evidence that strongly suggests a neurological

etiology in many children with ADD (Hynd, Hern, Voeller, & Marshall, 1991). The decade of the '90s should prove to be an exciting time, providing valuable information for prevention, diagnosis, and treatment of ADD.

Where are we now and how did we get here?

National Perspective

While the scientific community has been learning more about ADD, there has also been activity in the political arena. Advocacy groups, consisting largely of families and health care providers, organized to focus attention to students with ADD and the need for *schools* to respond more effectively to them. Most spokespersons for the various groups have called for a total school response to meet the needs of these students. However, in 1990 when the 101st Congress amended the Education of the Handicapped Act (P.L. 94-142), advocacy groups focused on special education. Questions were raised whether children with ADD in need of special education could qualify for special education services under the existing disability categories or whether there was a need for a special ADD category.

Advocates proposed that ADD be specifically added as a disability category in the new rules because they believed children with ADD often didn't qualify for special education services under the existing identified disability conditions. However, many education groups were opposed to including ADD as a separate disability category, arguing that it wasn't necessary since children with ADD who needed special education qualified for services under the existing law.

Ultimately, Congress did not include ADD in the reauthorization of P.L. 94-142, now called the Individuals with Disabilities Education Act (IDEA). However, the U.S. Department of Education reviewed public comments and subsequently issued a memorandum clarifying responsibility of state and local school districts for children with ADD under federal law (Davila, Williams, & MacDonald, 1991).

This "clarification of policy" memo did not signify a change in policy or a new regulation. It simply clarified existing procedures. Key points from the memo are:

▼ Students with Attention Deficit Disorders may be eligible for special education services if they meet criteria for "Other Health Impaired," "Seriously Emotionally Disturbed," or "Specific Learning Disability."

▼ All IDEA requirements for evaluation, due process, and procedural safeguards apply for students with ADD who are referred to special education.

▼ Students who do not qualify for special education services under IDEA regulations may be disabled under Section 504 of the Rehabilitation Act of 1973.

▼ If a student is defined as disabled under Section 504, the school must make an individualized determination of the child's educational needs.

Thus, as has always been the case, students with ADD may qualify for special education if they are eligible according to the criteria for learning disabilities or emotional disturbance. In addition, if the child's ADD presents "a chronic or acute health problem resulting in limited alertness," and if special education and related services are needed, students may qualify for special education solely on the basis of their ADD (Davila, Williams, & MacDonald, 1991). Meanwhile, if a student is an eligible student with disabilities under Section 504 and needs only accommodations in the regular classroom, those accommodations must be provided.

"Section 504" refers to a section of the Rehabilitation Act of 1973 (P.L. 93-112), which is commonly known as the "civil rights law for the disabled." This law states that no person with a disability that substantially limits one or more of a person's major life activities (such as learning) can be discriminated against. ADD is considered a disability if the condition substantially limits a major life activity. Under 504, schools must make adequate provision so that students with disabilities will not be "excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity that receives benefit from federal financial assistance." (Handicapped Requirements, 1993, p. 31) *This means that schools must make changes and offer supports to ensure that all students (including those with ADD) have equal access to the services and the opportunity to benefit from those services.*

It is important to note that many students who do *not* qualify for special education under IDEA still qualify for considerations under Section 504.

An important implication of 504 is that regular education teachers are responsible for making accommodations so that students with ADD have equal opportunity to benefit from and participate in the services offered by the schools.

Every school district in Colorado is required to have someone who is designated as a 504 coordinator. These individuals should be able to help with questions about schools' roles in identifying and educating students with disabilities under 504 law and regulations. Section II, Chapter 4, of this handbook also contains further information about this important law.

In summary, the federal memo on ADD states, "a range of strategies is available to meet the educational needs of children with ADD... (and) SEAs LEAs should take the necessary steps to promote coordination between special and regular education programs."

One other development that resulted from the public testimony was the establishment of four federally funded research centers to provide more information about ADD. The centers are charged with synthesizing current information about ADD and disseminating that information to parents, educators, and researchers. The four centers are The University of Miami Center and the Arkansas Children's Hospital Research Center, both of which will synthesize and distribute information about identification and assessment, and the University of California, Irvine, and the Research Triangle Park (RTI) Centers, which will both focus on interventions for ADD. Hopefully, through the efforts of these four centers we will have more helpful information about identification, assessment, and remediation for students with ADD.

Colorado Perspective

Colorado's Exceptional Children's Educational Act reflects the federal law. There are clear procedures for special education eligibility for Perceptual/Communicative Disability (PC - Colorado's term for learning disability) and Significant Identifiable Emotional Disability (SIED) in Colorado. Services to students with ADD always have been provided through these two categories. However, the Other Health Impaired and the Section 504 considerations that were addressed in the federal clarification memo added new dimensions that needed to be addressed. In addition, the criteria for PC and SIED did not contain specific references to attending behaviors.

In the spring of 1992, the Colorado special education rules for administration of the state law were amended. The State Board of Education heard a considerable amount of testimony about the need for students with ADD to have special education services and then amended the rules in several places. Under the new rules, students with ADD may qualify for special education in one of three existing categories.

First, the Colorado law does not contain an "Other Health Impaired" category of disability. The closest the Colorado Act has is "Physical Disability." Now the amended Colorado rules for Physical Disability specifically list ADD as a condition which may qualify a student for services. In addition, the criterion of a medical diagnosis was omitted from the new rules. It is clearly the intent of the new rules that schools should consider students with ADD as being eligible to receive special education services if they meet the criteria for the physical disability category.

Second, the rules were changed for the category of Significant Identifiable Emotional Disability. The words "to pay attention" were added to the phrase "significantly limited self control" and now reads "significantly limited self control including an impaired ability to pay attention" as one description of emotional or social functioning that may prevent a child from receiving reasonable educational benefit from regular education.

Third, in the description of Perceptual or Communicative Disability the new rules state that the disability is related to "a basic disorder in the psychological processes affecting language and/or learning (that) may manifest itself in an impaired ability to listen, think, attend, speak, read, write, spell or do mathematical calculations."

The above discussion applies to children six years old to high school graduation or age 21. As a result of a groundswell of attention to the needs of young children with disabilities, laws have recently been passed both nationally and in Colorado mandating services to children three through five years old. There are slightly different criteria and procedures for special education eligibility for young children with disabilities. Section II, Chapter 3 contains a detailed description of how a young child with ADD may qualify for special education services.

Decisions made in political arenas reflecting society's wishes have heightened our awareness of this population of students and increased our

responsibility to respond systematically. We are now challenged to refine our policies, procedures, and strategies to ensure that we meet the needs of students with ADD.

Summary

As schools develop policies and procedures and work to provide appropriate instructional responses to meet the needs of students with ADD, it is important to remember:

1. ADD is not a new condition. Children with attention problems have always been in our public schools, and many of them have been receiving special education services.

2. There are federal and state mandates to the schools to provide appropriate services to students with ADD.

3. There is a range in the severity of ADD. Some students require only minimal classroom modifications, others will need accommodation under Section 504 requirements, while some students with ADD will require special education services.

4. There are several ways in which a child with ADD might qualify for special education services.

References

Aleman, S. (1991). *CS report for Congress: Special education for children with Attention Deficit Disorder: Current issues.* Washington, DC: Congressional Research Service, The Library of Congress.

Davila, R., Williams, M., & MacDonald, J. (1991). *Clarification of policy to address the needs of children with Attention Deficit Disorders within general and/or special education.* Washington, DC: United States Department of Education, Office of Special Education and Rehabilitative Services.

Frick, P. J., & Lahey, B. (1991) The nature and characteristics of Attention-Deficit Hyperactivity Disorder. *School Psychology Review, 20* (2), 163-173.

Goldstein, S., & Goldstein, M. (1992). *Attention-Deficit Hyperactivity Disorder: The current state of the field.* Symposium handbook. Salt Lake City: Neurology Learning & Behavior Center.

Handicapped requirements handbook: Federal programs advisory service, (1993). Washington, DC: Thompson Publishing Group.

Hynd, G., Hern, K., Voeller, K., & Marshall, R. (1991). Neurobiological basis of attention-deficit hyperactivity disorder (ADHD). *School Psychology Review, 20* (2), 174-186.

Levine, M. (1992). *19th annual conference on language and learning. Perspectives on ADD/ADHD: Diagnosis and treatment.* Denver, CO: December 4-5.

McBurnett, K., Lahey, B. B., & Pfiffner, L. J. (1993). Diagnosis of Attention Deficit Disorders in DSM-IV: Scientific basis and implications for education. *Exceptional Children, 60* (2), 108-117.

Swanson, J., Cantwell, D., Lerner, M., McBurnett, K., Pfiffner, L., & Kotkin, R. (1992). Treatment of ADHD: Beyond medication. *Beyond Behavior, 4* (1), 13-22.

Teeter, P. A. (1991). ADHD: Current issues and controversies. *School Psychology Review, 22* (2), 161-162.

Zentall, S. (1993). Research on the educational implications of Attention Deficit Hyperactivity Disorder. *Exceptional Children, 64* (2), 143-153.

SECTION II

Suggested Policies and Procedures for School Districts

Section II contains information about schools' responsibilities to students with ADD. Several different laws which provide specific directives about policies and procedures must be followed by public schools. In addition, there are important philosophical considerations that guide best practice.

Chapter 3 discusses basic concepts and processes for children three through five years old. Chapter 4 provides information about the responsibility of public schools for students 6 to 21 years of age (or to high school graduation). Finally, Chapter 5 outlines important procedures and safeguards for schools to follow when students are taking medication.

The intent of each chapter is to summarize the key concepts and requirements needed to provide efficient, effective, and appropriate services to students with ADD in Colorado schools.

CHAPTER 3

Schools' Responsibility for Young Children with ADD

ADD is manifested by a number of characteristics which may effect children from the first months of their lives through their school years and into adulthood. Young children with ADD may have social-emotional and learning difficulties which interfere with the development of healthy self-esteem. The combination of learning and behavior difficulties and poor self-esteem often interferes with success in later life. However, with understanding, support, and positive interventions at an early age, children with ADD and their families can be helped. Early intervention is crucial and the support offered through early childhood education provides a potent vehicle for meeting the needs of young children with ADD.

Early childhood care and education is based on a philosophy of developmental appropriateness which establishes a framework for both practice and policy. This chapter considers first the philosophy and best practices that guide services for young children with attending difficulties and their families. Then it reviews recent federal and state legislation (P.L.-101-476; P.L. 99-457; H.B. 90-1127; H.B. 90-1137; E.C.E.A; and 45 CFR, Parts 1304, 1305, 1308) that is important to consider in meeting the needs of young children with ADD. These laws guarantee that three- to five-year-old children who qualify will receive special education services based on their individual needs.

What are the core concepts that guide early childhood practices and mandates?

Early childhood care and education is based on the philosophy of developmental appropriateness. According to the National Association for the Education of Young Children (NAEYC), the concept of developmental appropriateness has two themes.

1. **Age appropriateness.** Knowledge of typical development of children within the age span served by the program provides a framework from which teachers prepare the learning environment and plan appropriate experiences.

2. **Individual appropriateness.** Each child is a unique person with an individual pattern and timing of growth, as well as individual

> personality, learning style, and family background. Both the curriculum and adults' interactions with children should be responsive to individual differences. (Bredekamp, 1992, p.2)

These two concepts are essential features in developing programs and guidelines for young children with attending difficulties.

How are these concepts important when we think about children with attending difficulties?

First, *all* young children may exhibit some of the behaviors that are associated with attending difficulties. Therefore, the concept of age-appropriateness is important in considering whether a child is having attention difficulties beyond what is typical of all children.

Typical characteristics often associated with attending difficulties include:

- Short attention span,
- Acting before thinking,
- Easily distracted,
- Frequently in motion,
- Inconsistency in learning,
- Difficulty generalizing new information,
- Inability to remember,
- Often disorganized,
- Language delays,
- Lack of self-esteem,
- Difficulties with social relationships with adults, siblings, and peers,
- Inability to accept limits or follow routines and rules,
- Frequent mood swings,
- Awkwardness or clumsiness, and
- Lack of concern for safety.

Since many young children display these behaviors, they should not be considered exceptional unless their severity and frequency are interfering with the child's development and learning. Even when it may seem that something is unusual, the lines between extremes of normal developmental behavior and symptoms of a disorder are unclear (Jones, 1991). Therefore, it is important to have a thorough understanding of the normal development of attention and its importance for learning before considering whether a young child might have an attention difficulty.

The concept of individual appropriateness is important, too, because it is necessary to consider whether the attention difficulties and accompanying behaviors are interfering with the child's development and learning. An excellent way to learn this is to observe a young child's approach to tasks (Jones, 1991). In order to understand the child's individual development and needs it is important to observe a child during solitary, parallel, and group play; at home with the family; and in new environments (Jones, 1991).

What factors are related to effective intervention?

When considering intervention strategies for young children with attending difficulties, it is important to consider the child's perspective. For instance, a child's environment includes his or her family, caregivers, school, and community. What may seem like a structured environment with few transitions from an adult's perspective may, in fact, involve many changes and shifts of focus when viewed from the perspective of the child. Thus, intervention strategies need to be used frequently and consistently across all environments and by all the caregivers in order for the child to benefit from them.

In addition, intervention strategies need to be age-appropriate. A primary developmental goal for children three to five years old is to develop self-control. This may be particularly difficult for a child with significant attending difficulties. For these children, there must be behavior management systems in place. Effective behavior management strategies include rewarding appropriate behavior, giving effective directions and requests (Landau & McAninch, 1993), and establishing simple, clear classroom routines that are followed consistently. Because children this age learn best from exploration and active involvement, the environment must be structured to encourage exploration and involvement. This delicate balance of consistent external support and structure that allows involvement provides the opportunity for a child to learn internal control mechanisms.

Strategies must also be individually appropriate. What works for one child may not be successful with another. One child may need more interventions than another, as well as different intervention strategies.

The three principles for intervention with young children are:

- Strategies must be used frequently and consistently across all environments;
- Strategies must provide external support, yet the environment must be structured appropriately to allow active involvement in order to assist the child in the development of internal control; and
- Strategies must be individually designed for each child.

Section IV contains a chapter of specific intervention strategies for children three to five years of age who have attending difficulties.

It's also important for interventions to focus on building positive family-child relationships. Research and experience indicate that parental stress related to attention deficit characteristics reaches a high point when the child is between three and six years old (Barkley et al., 1985). Therefore, effective intervention strategies include efforts to increase the family's awareness that the child's behavior may be beyond his or her control. The family may need support to develop positive family interactions in spite of what at times seems almost "impossible behavior" (Teeter, 1991). In addition, parents/guardians and caregivers may appreciate learning effective behavioral management strategies (Braswell, Bloomquist, & Pederson, 1991).

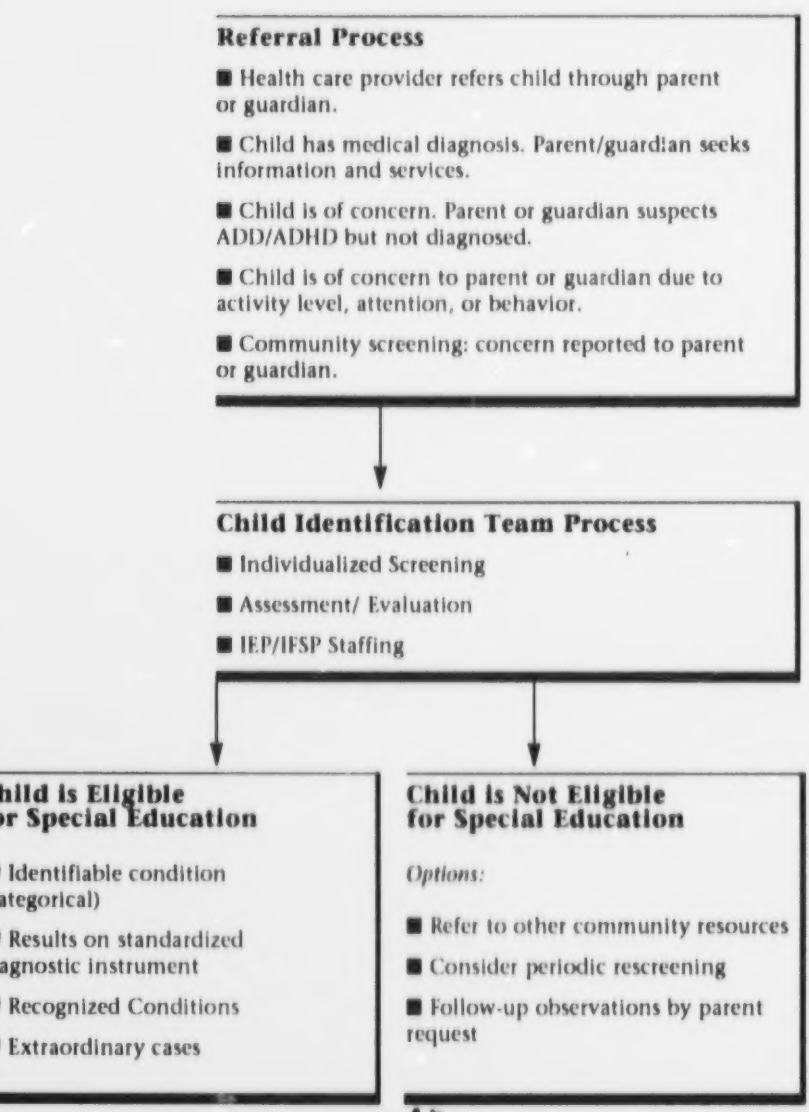
It is apparent from this discussion that *the cornerstone for effective intervention is communication and collaboration among all who relate to the child.*

What does the law say needs to happen for young children?

According to current legal mandates, children with attending difficulties may be eligible for free and appropriate education services. In Colorado, there is a process for determining if a young child qualifies for these services, but the child and his or her family must participate in the child identification process in their community (Figure 3-1). Information about this community process is available from the local school district. The identification process begins when there is a concern about the child's health, development, or behavior. The concern may come from health care providers or parents, or as a result of a community screening. The child's parents/guardian then request that the child be seen by the community Child Identification Team.

FIGURE 3-1

Process: Early Childhood Response to Young Children (ages 3-5) With Attending Difficulties


Referral Process
■ Health care provider refers child through parent or guardian.
■ Child has medical diagnosis. Parent/guardian seeks information and services.
■ Child is of concern. Parent or guardian suspects ADD/ADHD but not diagnosed.
■ Child is of concern to parent or guardian due to activity level, attention, or behavior.
■ Community screening: concern reported to parent or guardian.
Child Identification Team Process
■ Individualized Screening
■ Assessment/ Evaluation
■ IEP/IFSP Staffing
Child is Eligible for Special Education
✪ Identifiable condition (categorical)
✪ Results on standardized diagnostic instrument
✪ Recognized Conditions
✪ Extraordinary cases
Child is Not Eligible for Special Education
Options:
■ Refer to other community resources
■ Consider periodic rescreening
■ Follow-up observations by parent request

Once a child is referred, the Child Identification Team Process begins (Figure 3-1). Depending on the child's and family's needs, a screening may be conducted after the referral. Early childhood screening is conducted in order to identify a child who might benefit from intervention because of the *potential* existence of a problem or disability. Screening is a limited procedure and cannot definitively describe the nature and the extent of a disability. Screening only determines if a child may need further assessment.

If there are concerns raised by the screening procedures, a more detailed evaluation is completed. Results provide information to determine the existence of a disability and lead to suggestions for intervention strategies.

After the assessment is completed, the family and the Child Identification Team meet to discuss the information gathered and to determine if the child is eligible for special education services. By Colorado definition, there are four ways in which a child age three through five may be eligible to receive these services. Figure 3-2 lists the eligibility criteria for each of these categories. It's important to note that the criteria for eligibility for children three through five are more flexible than the criteria for the school-age population.

The Child Identification Team has four choices when determining eligibility. The first choice (the top box in Figure 3-2) is the traditional categorical method, which uses the state definitions for an identifiable disability such as physical impairment, or perceptual or communicative disorder.

The second choice (second box in Figure 3-2) is related to a significant delay in one or more areas of development, which must be documented by the results of a standardized diagnostic instrument. It is important to remember that it is not always easy to determine an accurate score on young children.

The third choice for eligibility (third box in Figure 3-2) may be used when a child already has been identified as having a recognized condition, and empirical data are available to document how this condition relates to significant future delays. A child with Down Syndrome and a child who has had chronic otitis media are examples of children who

FIGURE 3-2

Determining Eligibility:
Early Childhood Response

Criteria 1: Age 3 through 5
Criteria 2: Factors Related to Disability

Categorical Disability

✪ Identifiable Disability

TRADITIONAL: SPECIFIC DISABLING CONDITION AND IMPACT

- Long-term physical impairment or illness.
- Significant identifiable emotional disorder.
- Identifiable perceptual or communicative disorder.
- Speech disorder.

Non-Categorical Preschool Disabilities

✪ Results on Standardized Diagnostic Instrument

SIGNIFICANT DELAY IN ONE OR MORE AREAS OF DEVELOPMENT

- 7th percentile or below.
- 1.5 standard deviation below mean. (Standardized score of 76 if mean is 100, S.D. 16.)

In one or more areas of development: cognition, speech/language, physical/motor, psychosocial.

✪ Recognized Conditions

RECOGNIZED CONDITION WITH IMPLICATION FOR FUTURE IMPACT

- Those conditions that we know thorough current research and *empirical data* are associated with significant delays in future development.

✪ Extraordinary Cases

MULTIDISCIPLINARY CLINICAL OPINION OF A DISABLING CONDITION

If a standardized score cannot be determined, the informed clinical opinion of an multidisciplinary team may be used.

- Parents must be included.
- Need documentation of rationale for inability to obtain a standardized score.

may qualify in this category. Those who do qualify in this category still need to be evaluated according to the described evaluation procedures and Individual Education Plan (IEP) process.

The final choice (the bottom box in Figure 3-2) results from a multidisciplinary clinical opinion that there is a disabling condition. This choice is only used in situations where none of the other options are appropriate and yet it is clear to the team, including the parent(s), that a child needs individualized services in order to benefit from regular education. This decision must be made in partnership with the parents and must include documentation of the reason for the inability to otherwise determine eligibility.

The second, third, and fourth choices are all considered as one category ("non-categorical preschool disabilities") for federal counting purposes. This category can only be used for young children three through five years of age. If children are not six years old by December 1, they still bring in preschool federal funding whether they are being served in kindergarten or a preschool classroom. If a child is six years old by December 1, he or she can no longer be eligible for services with a non-categorical preschool disability.

Due to the impact of attention on all areas of development, young children with attending difficulties may qualify for services according to any one of the four definitions of eligibility.

If a child is being served by Head Start or if Head Start may be a possible placement, there are specific rules relating to eligibility and ADD. (See 45CFR, Section 1308.7, Federal Register, 58 (12) January 12, 1993.)

Once the child is determined to be eligible for special education services, the family and the Child Identification Team develop an appropriate IEP and/or an Individual Family Service Plan (IFSP) (Figure 3-1). Such a plan may include recommendations for arranging the physical space used for instructional and play activities, for modifying the curriculum to which the child is exposed, and for providing specific intervention strategies which are age- and individually-appropriate for the child. In addition, some students may need direct intervention from a variety of related services staff (e.g., speech/language specialists, occupational and/or physical therapists, psychologists, special education teachers).

Understanding and responding to ADD symptoms in young children can be a challenge because some of the concerns simply represent individual differences in developmental rates (Landau & McAninch, 1993). Excessive activity, impulsivity, and the inability to pay attention may not be related to a disability, but these are difficult and extremely challenging behaviors. If a child is not eligible for special education services, there still may be a need for other types of help. If this is the case and if the child does not qualify for special education services, the family and the Child Identification Team may decide to refer the child to other community resources, consider periodic rescreening, or conduct follow-up observations.

References

Barkley, R., Karlsson, L., & Pollard, S. (1985). Effects of age on the mother-child interactions of hyperactive children. *Journal of Abnormal Child Psychology, 13,* 631-638.

Braswell, L., Bloomquist, M., & Pederson, S. (1991). *ADHD. A guide to understanding and helping children with Attention Deficit Hyperactivity Disorder in school settings.* Minneapolis: University of Minnesota.

Bredekamp, S. (ed.). (1992). *Developmentally appropriate practice in early childhood programs serving children birth through eight, expended edition.* Washington, DC: National Association for the Education of Young Children.

45 CFR, Parts 1304, 1305, 1308. Head start program performance standards on services for children with disabilities. *Federal Register, 58* (12), Thursday, January 12, 1993, 5501-5518

Jones, C. B. (1991). *Sourcebook for children with Attention Deficit Disorder. A management guide for early childhood professionals and parents.* Tucson: Communication Skill Builders.

Landau, S., & McAninch, C. (1993). Young children with attention deficits. *Young Children, 48*(4), 49-57.

Teeter, P. A. (1991). Attention Deficit Hyperactivity Disorder: A psychoeducational paradigm. *School Psychology Review, 20* (2), 266-280.

CHAPTER 4

Schools' Responsibility for Students with ADD Ages 6 to 21 Years

ADD is a condition that affects individuals in varying degrees, having anywhere from a mild impact to one that is very severe. Therefore, schools need to have available a variety of responses and supports to meet differing student needs.

When the impact of ADD is mild, students may have some difficulty learning and/or behaving in the classroom or school, but they can be successful with minor instructional accommodations by teachers. Usually these adjustments are helpful for all students in the class. Typical accommodations include effective classroom management systems, clear, specific classroom and school rules, additional time to complete tasks, reduction in the amount of work that is expected, and organizational systems for materials and assignments. Thus, those who have primary responsibility for making accommodations are classroom teachers who may benefit from support and suggestions from the school Child Study Team.

As the severity of ADD increases, so does the need for schools to respond systematically. Students who are affected moderately by ADD have more difficulty learning and/or behaving, which requires that instructional strategies and outcomes be adjusted to meet individual needs. For instance, a student with moderate needs may require a specifically tailored behavior management plan, in addition to the general classroom management plan. Classroom and homework assignments may need to be altered specifically for the student and the student's performance may need to be carefully monitored. Individual assignment sheets and checklists may be required and frequent communication with the family is often important.

Students who are impacted to a moderate degree often also need instruction in social skills and learning strategies such as study and organization techniques. These may be beyond what is typically necessary for the student's peers.

When students experience moderate impact from ADD, classroom teachers may need support. Educators with specific expertise in the

social/emotional and learning areas may need to help design appropriate accommodations. Administrators need to help develop and formalize plans to insure consistency and accountability throughout the building. The schools' response must be more intentional, more intense, and more individualized.

Finally, ADD has a severe impact on behavior and/or learning for some students. These students may find it impossible to benefit from classroom instruction and the general curriculum without significant changes and support. They need specialized instruction designed to meet their individual needs and "expanded curricula" encompassing three curricular strands. First, students with more severe levels of ADD need academic curriculum adjusted to their level and pace. Second, they may need to learn skills necessary to manage themselves, their employment, and their environment so that they can function independently. Third, they may need to learn skills specifically related to their unique difficulties, including controlling and focusing their energy, and selecting, planning, self-monitoring, and modifying their learning and behavior. (See Section IV, Chapter 9 for specific strategies to accomplish these skills.)

Students who are severely impacted by ADD often require additional supports to ensure that their needs are met. They may need direct services from specialists trained in social-emotional and/or learning strategies effective for students with ADD. Their teachers may need support in planning and implementing behavior plans or instructional strategies. Transitional plans are important as students move from one grade to the next, from one school to the next, and from one environment to the next. It is also essential that there be a consistent response from everyone in the student's environment. Therefore, ongoing, formal evaluation and planning are essential components of successful remediation. The key for students who are highly impacted by ADD is that plans for them must be highly intentional, intense, and individualized.

It's important to remember that students with all levels of severity may take medication for their condition. Therefore, involvement with health care providers may be a component of the school's response regardless of the level of impact of ADD. In addition, communication with the family is likely to be an important aspect of the school's role with students who have ADD.

When the impact of ADD is moderate to severe and students require more significant accommodations and/or services, two important laws provide direction. Section 504 of the Rehabilitation Act of 1973 and the Individuals with Disabilities Education Act (IDEA) provide parameters for constructing part of the array of services needed in schools for children and youth ages six to 21 (Figure 4-1).

Why do we need laws?

Both Section 504 and IDEA are based on the concept of "protected class" status. They were conceived during the 1960s as a response to national concern that many members of our society had been prevented from enjoying their full civil rights due to discrimination. Furthermore, this discrimination was often based on what sociologists call ascription, that is criteria present at birth such as race, sex, class, nationality, religion, or disability. Lawmakers attempted to rectify the situation by granting "protected class" status to persons who had experienced such discrimination. This status was intended to guarantee access to all societal institutions, including schools, and to provide the additional support necessary to achieve that access. Funding for these additional resources was tied directly to a person's designation as a member of the "protected class."

Special care was taken in both laws that inclusion of a student in a "protected class" group be accomplished in an objective manner. This is especially important because "protected class" status can be a double-edged sword, carrying the possibility of negative consequences along with intended benefits. On the one hand, labels may cause a negative stigma for students and long-term implications for future life choices. On the other hand, it is important to provide protections and supports to those children and youth for whom experience has shown such help to be essential. Objectivity in the process of identification and determination of eligibility was intended to prevent over-inclusion of students while simultaneously ensuring access to those for whom it is necessary.

How is eligibility determined?

In order for a student to be determined to have a disability and to be eligible for the protections and services granted under Section 504 or IDEA, two circumstances must co-exist. First, there must be a disabling

FIGURE 4-1

Eligibility: Relative Emphasis of Two Co-Existing Circumstances

In order to be determined to have a disability and to be eligible for special education, two circumstances must co-exist:
1) There must be a ***condition*** or disability (something within the child that is at least partially responsible for his/her difficulty with learning.
2) This condition must have an ***impact*** on the child's education.

THE EMPHASIS IN ASSESSMENT CHANGES DEPENDING ON THE DISABILITY.

Condition	*Impact on Education*
HD Hearing Disability **VD** Vision Disability **PD** Physical Disability **MD** Multiple Disability HIGH EMPHASIS	LESS EMPHASIS
SIED Significantly Identifiable Emotional Disability **PC** Perceptual/Communicative Disability (Learning Disabilities) **SLIC** Significant Limited Intellectual Capacity **SLD** Speech Language Disability LESS EMPHASIS	HIGH EMPHASIS
PD:ADD Physical Disability: Attention Deficit Disorder HIGH EMPHASIS	HIGH EMPHASIS

condition; something within the child that is at least partially responsible for his or her difficulty with learning. Second, this condition must have an *impact* on the student's education (Figure 4-1). When considering eligibility for students with physical disabilities such as a vision, hearing, or physical disability, more emphasis is placed on documentation of the existence of the disability. Conversely, when considering eligibility for students with invisible disabilities such as learning disabilities, emotional disturbances, or speech/ language disabilities, more emphasis is placed on demonstrating the impact of the disability on the student's education.

ADD is a condition that may qualify a student for protection under 504 and/or services under IDEA depending on the severity of the impact on the student's education. Since ADD is both a physical and an invisible disability, determining eligibility for students with ADD offers a special challenge. Both the existence of the condition and its impact on education will need to be given equal attention. See Appendix A for suggestions from the Colorado Society of School Psychologists for documenting both circumstances.

While documentation is essential, it is important to remember that the determination of eligibility under IDEA can only be made by a school staffing team. The team, which includes the parents, carefully considers all assessment information to determine if eligibility criteria has been met and to develop appropriate programming for the child. Team decisions are made by consensus.

What is Section 504 of the Vocational Rehabilitation Act?

Section 504 of the Rehabilitation Act of 1973 was intended to guarantee that discrimination on the basis of disability did not occur in any program or activity that received federal financial assistance. One of the ways in which agencies such as schools demonstrate nondiscrimination is by providing equal access to their programs. However, it is not sufficient that schools simply allow a student with disabilities to attend. The Act also mandates that necessary accommodations and adaptations be made to assist students so that they have equal access to educational opportunities. Braille textbooks for students with visual impairment is such an adaptation. Changes to the curriculum and instructional strategies is another.

As the impact of ADD on the student's education becomes greater, it may be appropriate to consider a Section 504 response. A person is considered "disabled" by standards of 504 if he or she: a) has a physical or mental impairment that substantially limits one or more major life activities; b) has a record of such an impairment, or c) is regarded as having such an impairment. Eligibility criteria included in Section 504 are not very specific, but do address both the condition and the impact on education. Impairments include physiological, mental, and psychological disorders. Impact on education is defined as "substantially limiting major life functioning such as walking, seeing, hearing, speaking, breathing, *learning*, and working."

What is the Individuals with Disabilities Education Act (IDEA)?

The Individuals with Disabilities Education Act (IDEA) of 1975 was intended to move beyond nondiscrimination of students with disabilities and to require recipients of funds under the Act to take affirmative action. In effect, IDEA sets up a contract with school districts; in exchange for funding, districts agree to take positive steps to provide a free and appropriate public education (FAPE) to students with disabilities by providing specially designed instruction to meet their unique needs.

Because the parameters of an "appropriate" education for students with disabilities vary according to each student's needs, the law includes provisions for case-by-case decision-making through the development of an Individual Educational Plan (IEP) for each student. An IEP becomes the definition of "appropriate education" for a specific individual. Often the specialized instruction will need to be delivered by someone with special training. The cadre of specialized programs and service deliverers is typically referred to as special education.

As the impact of ADD on a student's learning becomes greater, the additional supports and resources provided by special education may become necessary. Students may be determined eligible for special education programming by being eligible in one of three categories: perceptual/communicative disability, significant identifiable emotional disability, or physical disability (see Figure 4-2).

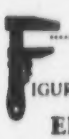


FIGURE 4-2

Eligibility: K–12 Responses

Criteria 1: There is a disability
Criteria 2: The disability impacts education

Perceptual/Communicative Disability

Condition:
Basic disorder in psychological process affecting language and/or learning; manifested in impaired ability to listen, think, attend, speak, read, write, spell or do mathematical calculations.

Impact on Education:
- Significant discrepancy between estimated intellectual potential and actual level of performance.
- Difficulty with cognitive and/or language processing.
- Significantly impaired achievement in reading, written language, math.

Significant Identifiable Emotional Disability

Condition:
Emotional or social functioning that prevents child from receiving educational benefit in regular education (significant limited self-control, including impaired ability to pay attention).

Impact on Education:
one or both
- Academic Funtioning: an inability to receive benefit from regular education, which is primarily due to the identified emotional condition.
- Social/emotional Functioning: inability to build or maintain interpersonal relationships, which significantly interferes with the child's social development.

and all four
- Variety of interventions tried.
- Social/emotional dysfunction to a marked degree.
- Social/emotional dysfunction pervasive and observable in at least 2 settings.
- Social/emotional disfunction existed over a period of time.

Physical Disability

Condition:
A sustained illness or disabling physical condition which prevents the child from receiving reasonable educational benefit from regular education (conditions such as traumatic brain injury, autism, attention deficit disorder, and cerebral palsy *may* qualify as a physical disability).

Impact on Education:
Disabling condition that interferes with ambulation, attention, hand movements, coordination, communication, self-help skills, and other activities of daily living to such a degree that it requires special services, equipment, and/or transportation.

A perceptual/communicative disability (the top box in Figure 4-2) is defined as "a disorder in one or more of the psychological processes involved in understanding or in using language which prevents the child from receiving reasonable educational benefit. (This disorder) may manifest itself in an impaired ability to listen, think, *attend,* speak, read, write, spell or do mathematical calculations" (2.02 (6)). Eligibility criteria for this disorder addresses both the condition and the impact on education. The condition is defined as a) a significant discrepancy between estimated intellectual potential and actual level of performance, and b) difficulty with cognitive and/or language processing. Impact on education is defined as having significantly impaired achievement in reading, math, or written language expression.

A significant identifiable emotional disability (the middle box in Figure 4-2) is defined as "emotional or social functioning which prevents the child from receiving reasonable educational benefit from regular education. Emotional or social functioning ...(includes) Significantly limited self-control, *including an impaired ability to pay attention"* (2.02 (5) (a) (x)). Eligibility criteria for this disorder also addresses both the condition and the impact on education. Criteria include indicators that the behavior exists to a marked degree in rate and intensity, is pervasive and observable in at least two different settings, and has existed over a period of time. Criteria for impact on education is met when the disability impairs the child's ability to develop academic skills or to build and/or maintain interpersonal relations.

A physical disability (the bottom box in Figure 4-2) is defined as "a sustained illness or disabling physical condition which prevents the child from receiving reasonable educational benefit from regular education. . . . Conditions such as *attention deficit disorder* may qualify as a physical disability, if (it) prevents a child from receiving reasonable educational benefit from regular education" (2.02 (1) (a)). Eligibility criteria for this disorder also address both the condition and the impact on education. The condition is defined as interference with ambulation, *attention,* hand movements, coordination, communication, and/or self-help skills to the degree that it requires special services, equipment and/or transportation. Criteria for impact on education is met when the disability requires continual monitoring, intervention, and/or specialized programming for the child to benefit from the education program.

Students with ADD may become eligible for special education by meeting the criteria for any one of the three disability areas of perceptual/communicative disability, significant identifiable emotional disability, or physical disability. Traditionally these students received special education services after having been identified as having a perceptual/communicative disability or a significant identifiable emotional disability. Today, many parents prefer determining eligibility under physical disability, believing it to be a more accurate description of their child. However, any advantage to one or another of the various categories used for the child to be eligible for special education may be more perceived than real in terms of the actual services the child will receive. This is because Colorado is committed to a needs-based service-delivery system.

The needs-based model is based on the assumption that it is more important to focus on students' instructional needs than on their disabilities. Therefore, in Colorado we begin by considering the student and his or her needs. Identified needs drive all decisions for instruction and services, which are then wrapped around the student in various configurations. As a result, the needs, not the disability area by which the student became eligible, determine the programming the student receives. Parents and professionals are able to focus on developing an appropriate program for the student rather than discussing the most appropriate disability area. This model is especially advantageous for students with ADD who may become eligible for services under three different disability areas.

What should schools' response be?

Schools can best respond to students with ADD by designing a range of responses to match the various degrees of severity of impact that the condition may have on students. Having a range of responses allows schools to insure student success with the least intrusive supports possible.

ADD may have a relatively mild impact on a student's learning. When this occurs, a general education response is most appropriate (see Figure 4-3, left hand column). Relatively minor adjustments in instruction and classroom management are often all that is necessary to ensure the student's success. Classroom teachers have primary responsibility for these accommodations. The only criteria for utilizing this level of response is that someone has a concern that an individual child is experiencing learning difficulties due to attending difficulties.

FIGURE 4-3

Spectrum of Schools' Responses to Students with Attention Deficit Difficulties

MILD IMPACT ⟷ SEVERE IMPACT

	General Education Response	Vocational Rehabilitation Act Section 504 Response	Special Education Response
Criteria	There is concern about learning.	Disability "substantially limits" learning.	PD: disabling physical condition "interferes with" learning. PC: processing difficulty and a "severe discrepancy" in learning. ED: behavior indicators and "interference" with learning.
Implications	Adjustments in general education classroom.	Adjustments in general education 504 form/ process/ protections.	IEP process.
Primary Responsibility	Classroom teacher.	School administrations.	Special education with general education collaboration.

As the the severity of ADD increases and the need for a more systematic response is required, schools may need to utilize the processes and protections of 504 (Figure 4-3, middle column). A 504 plan is helpful in identifying the accommodations that need to be made in the general education classroom. Because the plan often extends beyond one classroom, the building administrator holds primary responsibility for this level of response. Eligibility criteria for students accessing this level of school response is discussed in the preceding section, "What is Section 504 of the Vocational Rehabilition Act?"

The severity of impact for some students with ADD is so severe that it is impossible for them to benefit from classroom instruction without significant changes and supports from special education (Figure 4-3, right hand column). The IEP for these students should reflect the specially designed instruction necessary to meet their unique needs. Special education personnel, in collaboration with their general education colleagues, have primary responsibility to ensure that the student is learning throughout the school day. Eligibility criteria for students accessing this level of school response is discussed in the preceding section, "What is the Individuals with Disabilities Education Act (IDEA)?"

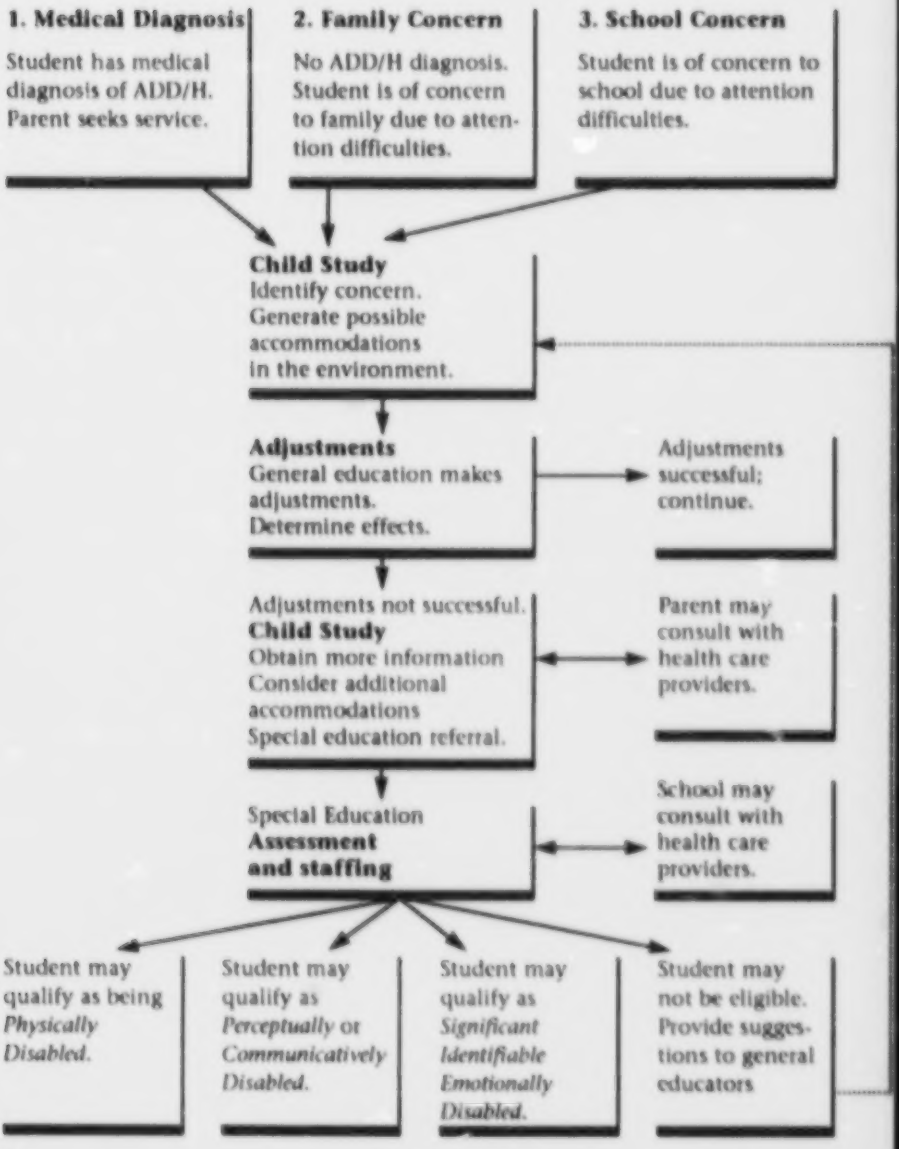
How do schools determine what level of response is best?

Schools are encouraged to respond to ADD by establishing a child study team in each building for initial consideration of students who have difficulty in school (Figure 4-4). The child study team, which is composed of educators and support personnel, meets regularly to discuss students, suggest strategies, and offer support.

The child study team may become aware of students with attention difficulties in one of three ways. In some cases the student may already have a medical diagnosis of ADD and the parents are seeking services. In other instances the student may be of concern to the family because of attending difficulties, but there has been no medical diagnosis of ADD. At other times, the student may be of concern primarily to school personnel due to attention difficulties. Regardless of how the concern originates, the child study team identifies concerns regarding the student and generates suggestions for possible accommodations or strategies.

FIGURE 4-4

Process: Schools' Response to Students with Attention Deficit Disorder


1. Medical Diagnosis
Student has medical diagnosis of ADD/H. Parent seeks service.
2. Family Concern
No ADD/H diagnosis. Student is of concern to family due to attention difficulties.
3. School Concern
Student is of concern to school due to attention difficulties.
Child Study
Identify concern.
Generate possible accommodations in the environment.
Adjustments
General education makes adjustments.
Determine effects.
Adjustments successful; continue.
Adjustments not successful.
Child Study
Obtain more information
Consider additional accommodations
Special education referral.
Parent may consult with health care providers.
Special Education
Assessment and staffing
School may consult with health care providers.
Student may qualify as being Physically Disabled.
Student may qualify as Perceptually or Communicatively Disabled.
Student may qualify as Significant Identifiable Emotionally Disabled.
Student may not be eligible. Provide suggestions to general educators

The next step is for the classroom teacher and support personnel to make the suggested adjustments in the classroom and other school environments. It is important to monitor the effects of the accommodations so that minor adjustments can be made as needed. Many times this level of support and accommodation is all that is necessary to assist the student in being successful.

On those occasions when the adjustments are not successful, it may be necessary to return to the child study team for further consideration. The team may feel that additional information regarding the child is necessary in order to develop a workable plan. At this point, parents may consult with their personal health care providers for any pertinent suggestions they might have. After reviewing the new information, the team may revise the plan, consider a 504 response or make a referral to special education.

If a special education referral is made, the process and procedures are the same as they are for all suspected disabilities. Parents will need to be informed and their consent obtained to conduct a multi-disciplinary, multi-faceted assessment. (See Appendix A for assessment suggestions for students with ADD.) Upon completion of the assessment, a staffing meeting should be held to determine if the student is eligible for special education services.

There are four possible results of a staffing for a student suspected of having ADD. One, the student may qualify as being physically disabled. Two, the student may qualify as having a perceptual/communicative disability. Three, the student may qualify as having a significant identifiable emotional disability. In each of these cases, the student is eligible for special education services and an IEP is needed. The fourth possibility is that the student may not be eligible for special education services. In this case an IEP is not required, but the team may wish to make suggestions to the teacher and/or consider a 504 response.

The impact of ADD on a student's ability to learn ranges from mild to severe. Effective schools have a range of responses available which effectively utilize available resources within the parameters outlined in Section 504 and IDEA. The process just described allows a school to utilize its resources most effectively when responding to a student with ADD.

CHAPTER 5

Schools' Responsibility for Medical Management

Many students identified as having ADD are treated with medication. In fact, the use of stimulant medication, either alone or in combination with other interventions, is the most widely used response for students with ADD.

It's important for educators and school nurses to be part of medical treatment of ADD because students often need to take their medication during school hours and school personnel often are responsible for seeing that they take it. School personnel are in an excellent position to observe the effects of medication of a student's behavior and learning, for they see the student throughout the day including right after medication is taken and when the effects of the medication are wearing off. It is helpful for school personnel to be aware of any effects medication may have on students' learning and behavior and to report the effects to families and physicians.

Because many students with ADD are treated with medication and because educators have important roles in that treatment, medical management in the schools is an issue. It is important to be aware of state rules and regulations and best practices in this area.

Rules and Regulations for Medical Management

The *Rules and Regulations Governing Schools in the State of Colorado*, a set of rules passed by the Colorado Board of Health in 1989, contain information about the health care management of students. It is necessary to use these when planning for students with ADD.

1. Medications shall be present in a school only on a current individual prescription basis and shall be administered only as prescribed on a physician's and parental written authorization. Such medications shall be kept in the original pharmacy-labeled bottle. An individual record shall be kept of medications administered by school personnel (9-105).

2. Medications administered at the school as described in Section 9-105 shall be stored in a secure, locked, clean container or cabinet (9-106).

3. A written plan with common procedures for handling emergency medical services shall be kept in each school. A current list of emergency services with telephone numbers shall be posted on one or more prominent place(s) in each school (9-108). [Authority: Sections 25-1-107(1)(m), 25-1-107(1)(s), 25-1-107(1)(t), 25-5-508, and 25-1-108(1)(c)(I); Colorado Revised Statutes, 1973 as amended.]

4. Also applicable in this area is the Delegatory Clause of the Nurse Practice Act of Colorado. The Delegatory Clause describes the conditions that must be followed when a nurse delegates authority for giving medication. The rules state that the school nurse is to assess the student and determine if it is safe practice for an unlicensed person to assist the student to take medication [19-38-103(10)(c), 12-388-132; Colorado Revised Statutes, 1991 Repl. Vol.].

What does all this mean for the schools?

In order to insure that medication is given to students in a safe, systematic, legal manner, there must be a process in each school for administering medication and monitoring its effect on the student's behavior. It's important to keep in mind the required practices for administering medication, the roles and responsibility of school personnel, and best practices for communication with parents and health care providers.

These are key factors to consider when there are students on medication in your school:

1. Medications must be:
   - Given only with the parent's/guardian's written request and permission,
   - Given only on the written authorization of a physician. (The pharmacy labeled bottle cannot be used as the physician's written authorization.)
   - Provided by the parent or guardian in an individual pharmacy-labeled bottle specifically identified for the student who is to receive it,
   - Documented by the school personnel who assists the student to take the medication. An ongoing record should be kept that includes the student's name, the medication, dosage, manner of administration, the time the medication is taken, and the name of the school personnel who assists the student, and
   - Stored in a secure, locked, clean container or cabinet.

2. If the medication is not given by the school nurse, there must be additional documentation for the delegation of authority to give it. This should include:
   - The name of the person who is delegating the responsibility,
   - The name of the delegatee (at least three persons should be identified and trained in each building),
   - A written Health Care Plan for the student, if indicated for management of health needs,
   - The physician's written authorization to give the medication at school,
   - The parent's or guardian's written permission to give the medication at school,
   - Instruction on administration of the medication,
   - Instruction on documentation,
   - A demonstration by the delegatee, and
   - Ongoing, monitored care of the student by the school nurse.

3. School personnel need to:
   - Make sure the student receives the prescribed medication when it is ordered,
   - Make sure the back up person to give medication checks the medication record to confirm it has not already been given by the primary person to give medication,
   - Notify the parents or guardians when medication is running low so an additional supply can be obtained before it runs out,
   - Monitor the student's behavior before the medication treatment begins, while it is ongoing, and when there is any change in the type or dosage of the medication,
   - Notify the school nurse and the parents/guardian if the student's behavior becomes unusual, and
   - Help establish and participate in ongoing communication among parents, the physician, and the school.

4. The school nurse needs to know and share the following information with others as needed:
   - The purpose of the drug,
   - The recommended dosage or dosage range,
   - Possible advantages of the medication, and
   - Possible side effects from the medication.

What are the commonly used drugs for ADD and what are their effects?

There is considerable information available on the effectiveness, side effects, and best use of medication in the treatment of ADD. Stimulants, the most commonly used drugs, have been used for over 20

years. In fact, there is information that suggests that about three percent of the elementary school population is treated for ADD with stimulant medication (Safer, 1988).

Although much is known about *what* medications to use, not much is known about *how* medications improve behaviors. Stimulants apparently work by helping the frontal lobe of the brain function in a more efficient and normal manner. "The frontal lobe performs executive functioning much like the board of management of a large company. The medicine increases attention span, increases consistency, increases compliance, increases organization, decreases distractibility, decreases impulsivity, decreases hyperactivity, decreases aimless talking and improves writing neatness" (Hudson, 1991, p. 1).

Although there is evidence that medications improve behavior and, to a lesser degree, academic productivity and accuracy, there is only limited data regarding the effectiveness of medication on long-term learning in students with ADD. Several recent studies have indicated that stimulant medication does improve short-term performance on tasks designed to resemble classroom assignments (working math problems, studying spelling words, reading short passages) (Swanson et al., 1992). The improvements were large enough on some tasks to speculate that students "would be expected to show achievement gains when medicated for a longer period of time" (Pelham et al., 1985, p. 951). However, Forness and colleagues (1992) found that, when they measured the effects of stimulant medication on reading comprehension and new learning, there was a less promising response. These researchers concluded, "If one's goal with methylphenidate (Ritalin) is to enhance basic academic skill or acquisition of new material, outcomes with methylphenidate seem very tentative indeed."

In summary, results of various experiments to determine the outcomes of use of medication for students with ADD suggest that the effects of the medication depend greatly on the choice of outcome being measured (Forness et al., 1992). Unfortunately, long-term follow-up studies haven't been conducted yet to support the conclusions from the short-term studies (Weiss & Hechtman, 1986; Satterfield et al., 1987).

Although the data are not totally optimistic about the effects of medication on academic learning, it is likely that students will have increased benefit from instruction when medication helps behavior (S. Forness,

personal communication, August, 1993). However, it appears obvious from the effect studies that medication alone cannot be expected to result in improved learning for students with ADD. Thus, the importance of an approach that includes educational interventions cannot be ignored.

Table 5-1 lists the most commonly used medications and describes advantages and possible side effects of each. (Murphy & Hagerman, 1992; *Utah Attention Deficit Disorder Guide*, 1992)

Anti-depressants are also sometimes used to treat ADD, usually when stimulant medication is not effective. Among the anti-depressants prescribed for ADD are desipramine (Norpramin), imipramine (Tofranil) and clonidine (Catapres), thioridazine (Mellaril), fluoxetine (Prozac), bupropion (Wellbutrim). Some of these have significant side effects.

The determination of which medicine to use with a student is made by a physician after considering several factors:
1.The child's reaction to the medicine (some children are better on one type than another).
2.The length of effect needed from the medication (a few hours or an entire day).
3. The number and types of the complaints to be treated. (For example, some students may be depressed and worried and do better on anti-depressants. Some teenagers may be disorganized and do better on Cylert taken once a day.)
(Hudson, 1991, p.1)

In addition to choosing the best medication to achieve maximum results with minimum side effects, it is also essential that the *amount* prescribed produce the desired benefits. Different dosage amounts have different results. As indicated in Figure 5-1, the size of the dosage needed to have a positive effect on learning is less than the amount needed to have a positive effective on behavior (Sprague & Sleator, 1977). Thus, to achieve a balance between the two, it may be necessary for the physician to prescribe a dose that will not achieve the maximum result on either learning or behavior, but which will result in the best effects for both of them together (S. Forness, personal communication, August, 1993). Clearly, for the physician to determine that delicate balance point, educators will need to provide information based on careful observation of the student's behavior and learning.

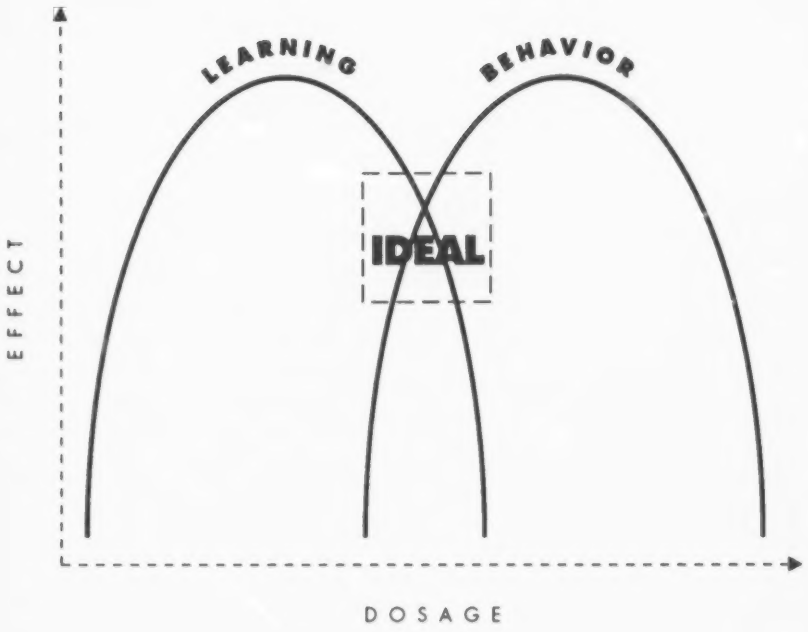
TABLE 5-1

Commonly Used Medications for ADD

▼ *Advantages*	▼ *Side Effects*
Methylphenidate (Ritalin) *Stimulant*	
■ Fewest side effects ■ Flexible dosing possible ■ Eliminated from body in hours	Side effects are unusual. When they do occur the most common are: appetite suppression, weight loss, difficulty concentrating. The following may occur at higher doses: mood lability, tendency to over-focus, unusually agitated behaviors, increased blood pressure, insomnia, changes in growth pattern, tic movements.
Dextroamphetamine (Dexedrine) *Stimulant*	
■ May be available in a liquid preparation ■ May be useful when other medications have not been effective	Restlessness, irritability, insomnia, increased heart rate, increased blood pressure, appetite suppression, weight loss.
Pemoline (Cylert) *Stimulant*	
■ Once-a-day dosing	Liver dysfunction, unusual movements of face, arms or hands, tic movements, unusually agitated behaviors, appetite suppression.

FIGURE 5-1

Effects of ADD Medication



Although medication has been used for 20 years to treat ADD, there is still controversy about prescribing drugs for students with ADD (Jacobson, 1992; Perl, 1992). Some researchers believe that stimulant medication may be over-used in the United States (Swanson, et al., 1992). In addition, there are many misconceptions about the effects of medication which may result from the fact that if the dosage is not carefully monitored the medication may not produce desired results. Also, some parents have strong feelings about not treating children with drugs, while others welcome pharmaceutical intervention. It is an important family decision whether or not to treat a student with stimulant medication.

Of importance to educators are the following:

- Medication does not cure ADD, nor does it appear to produce improvement in long-term learning, but it may help a student improve attending and reduce impulsivity;
- Students' behaviors and learning must be carefully monitored when they are on medication in order to determine what type of medication and dosage is most effective and to control possible side-effects;
- Consistent, ongoing communication is essential among family, physician, and school personnel about the pharmaceutical treatment; and
- Medication is only one part of a total treatment plan that should include behavioral and educational interventions and family education as needed. *If any one of the needed components is omitted, the effects of the treatment may be minimized.*

Clearly, it is important for those in schools to be knowledgeable, participating members of the treatment team so that students who receive medication will benefit fully from the treatment. With careful planning, efficient and effective systems can be established in each school.

References

Attention Deficit Hyperactivity Disorder: ADHD Task Force Report. (May, 1993). Lansing, MI: Michigan Department of Education.

Forness, S. R., Swanson, J. M., Cantwell, D.P., Guthrie, D., & Sena, R. (1992). Response to stimulant medication across six measures of school-related performance in children with ADHD and disruptive behavior. *Behavioral Disorders, 18,* (1), 42-53.

Hudson, M. J. (1991). *The use of medicine with Attention Deficit Hyperactivity Disorder.* Wheat Ridge, CO: Michael J. Hudson.

Jacobson, L. (1992). Ritalin: Controversial stimulant. *Atlanta Journal/The Atlanta Constitution,* Sunday, November 8, D7.

Murphy, M., & Hagerman, R. J. (1992). Attention Deficit Hyperactivity Disorder in children: Diagnosis, treatment and follow-up. *Journal of Pediatric Health Care, VI*(1).

Pelham, W. E., Bender, M. E., Caddell, J. M., Booth, S., & Moorer, S. (1985). The dose-response effects of methylphenidate on classroom academic and social behavior in children with Attention Deficit Disorder. *Archives of General Psychiatry, 42,* 948-952.

Perl, R. (1992). Ritalin use heavy in Atlanta. *The Atlanta Journal/The Atlanta Constitution,* Sunday, November 8, D 1 & 8.

Physicians' desk reference. (1993). Montvale, NJ: Medical Economics Co.

Safer, D. J. (1988). A survey of medication treatment for hyperactive children: Differential effects of dose on academic, learning and social behavior. *Journal of the American Medical Association, 260,* 2256-2258.

Satterfield, J. H., Satterfield, B. T., & Schell, A. M. (1987). Therapeutic interventions to prevent delinquency in hyperactive boys. *Journal of the American Academy of Child and Adolescent Psychiatry, 26,* 56-64.

Sprague, R., & Sleator, E. (1977). Methylphenidate in hyperkinetic children: Differences in dose effects on learning and social behavior. *Science, 198,* 1274-1276.

Swanson, H. M., Cantwell, D., Lerner, M., McBurnett, K., Pfiffner, L., & Kotkin, R. (1992). Treatment of ADHD: Beyond medication. *Beyond Behavior, 4(*1), 13-22.

Utah Attention Deficit Disorder Guide (working draft). (1992). Salt Lake City: Utah State Office of Education.

Weiss, G., & Hechtman, L.T. (1986). *Hyperactive children grown up.* New York: Guilford.

Family and Health Care Resources

When a student has ADD, school personnel are only one part of the team. Family members are affected by and involved with their child and health care providers are involved in pharmaceutical and/or mental health treatment. Educators are most helpful when they are aware of the resources available within each child's family and in the health care community. The chapters in this section provide information about resrources and perspectives.

Chapter 6 describes the philosophy of the Colorado Department of Education which is focused on developing an effective parent-professional partnership when students have disabilities.

Chapter 7 provides information from a family perspective. Pamela Murray, the mother of a child with ADD and an active advocate, provides thought-provoking and helpful information for educators.

Chapter 8 contains information about the health care community and the role that it may play in treating students with ADD. There is also specific information about services available through the Colorado Department of Health.

CHAPTER 6

The Parent-Professional Partnership

When a student with ADD qualifies for special education in Colorado, parents are closely involved with school personnel in planning. The Special Education Services Unit of the Colorado Department of Education is committed to developing a parent-professional partnership which will promote the best possible educational programs for students with disabilities.

I. *The development and implementation of a student's program is a shared responsibility between families and educators.*

As indicated by the following:

A. Families and educators are given the opportunity to participate in the selection of a time and place which accommodates the schedules of both.

As demonstrated by any one or more of the following:

- Staffings are held at a variety of times and places.
- Written invitations provide families and educators with choices for meeting times and dates.
- Telephone contacts to reschedule meetings are recorded.
- Policy, procedure, or practice allow for both standard and flexible meeting times.
- Families and educators are aware that either can call a staffing when necessary.

B. Time is allowed for planning an Individual Educational Program (IEP), which leads to the development of appropriate services.

As demonstrated by any one or more of the following:

- IEP meetings vary in length.
- Team members have communicated about estimated time required for meetings.
- More than one meeting may have been held to complete the IEP.
- Policy, procedure, or practice allows for meetings of varied length.

C. IEPs are developed by appropriate staffing team members as determined by the type of staffing the student needs.

As demonstrated by any one or more of the following:

- Team membership meets legal requirements.
- Additional persons are included based on student need.
- Family members participate in the staffing.
- Students participate in their own staffings.
- IEP team members attend staffings in their entirety.
- IEPs reflect collaborative decision-making between staff and families.

D. Goals are written in terms of identified student needs, instead of being restricted to what is available in a specific building or program.

As demonstrated by any one or more of the following:

- Annual goals with at least one objective are written at the staffing.
- Goals and objectives are developed based on student need and not on handicapping condition(s).
- Goals and objectives are developed in partnership between family and staff.
- Goals and objectives are developed by the whole team and not by one individual in isolation.
- Goals and objectives are written to address holistic student needs, not just academics.

E. Implementation of the IEP is a responsibility of the entire team.

As demonstrated by any one or more of the following:

- Services are provided by a variety of individuals and not limited to traditional service provision by a "specialist."
- Resources are provided to implement the IEP effectively.
- Some goals and objectives are implemented by both families and staff.

F. Opportunity exists for ongoing team interaction throughout implementation of the IEP.

As demonstrated by any one or more of the following:

- There is documentation of family contacts beyond the staffing meetings (i.e., telephone calls, progress notebooks).
- There is evidence that families know some team members prior to staffing meetings.
- Informal visits and conversation between families and educators allow time for information sharing in regard to beliefs, resources, and family dynamics.

II. *Each staff person and family member is an active, valued member and shares his or her expertise, information, and skills.*

As indicated by the following:

A. All team members have a common base of knowledge regarding the staffing process.

As demonstrated by any one or more of the following:

- District plan provides inservice opportunities regarding the staffing process for families and educators.
- All team members understand their own and others' roles and responsibilities on the team.

B. All team members are given the opportunity to interact, express varying points of view, and reach consensus.

As demonstrated by any one or more of the following:

- Parents are asked throughout the staffing to share their concerns and ideas, and adequate time is allowed to hear their input.
- Information-sharing during a staffing is a discussion and not a sequential reporting of assessment data.
- All team members have the freedom to voice varying points of view and the opportunity to reach consensus.

C. All team members have an opportunity to have their information in a written format that will enhance their ability to contribute during a staffing and assure that important points won't be forgotten.

As demonstrated by any one or more of the following:

- The district has an assessment form used by families.
- There is evidence that families and educators share information or summarized information with all team members prior to staffings.

III. *The staffing team considers the student holistically in all environments: home, school, and community.*

As indicated by the following:

A. The IEP goals and objectives are written and implemented across environments.

As demonstrated by any one or more of the following:

- IEPs include goals and objectives for home, community, and school environments.
- IEPs address the student's need for friendships and relationships.
- Goals and objectives are not just academic in nature.
- Instruction is provided in variety a of environments.
- The family and school develop a coordinated effort to implement the IEP across environments.
- Life skills and transition planning are addressed.

IV. *A support system exists between families and educators to meet the emotional needs that exist when students present unique, changing challenges.*

As indicated by the following:

A. Families and educators have established two-way communication.

As demonstrated by any one or more of the following:

- Educators and families use written communication to share information (i.e., notebooks, weekly updates, newsletters, etc.).
- Families are invited and encouraged to visit classes.
- Educators are invited and encouraged to visit the home.
- Parents and educators are included on special education advisory committees.
- Oral and written materials are understandable, jargon-free, and the reading and vocabulary levels are appropriate.

B. Opportunities for training and development of skills are provided to families and educators. This partnership promotes opportunities to learn together and respond to the changing needs of the student.

As demonstrated by any one or more of the following:

- Inservice training is offered to parents and educators.
- Parents and educators jointly attend workshops, trainings, and conferences.
- When new programs are being considered, parents and educators meet together to discuss the implication of implementing the programs.
- The Special Education Services Unit provides funding for parents and educators to attend conferences as a team.

V. *Partnership realizes that relationships can and will survive disagreement and conflict. Commitment to the partnership includes the right and responsibility of both the school and family to understand and access a range of conflict resolution options.*

As indicated by the following:

A. Information is available regarding conflict resolution and procedural safeguards.

As demonstrated by any one or more of the following:

- Documentation exists that families and educators have information regarding conflict resolution procedures at the building and district level, mediation, and due process procedures.
- Informal surveys would indicate that families and educators understand how to access conflict resolution procedures, mediation, or due process.
- Based on an informal survey, neither families nor educators would describe mediation or due process procedures as "giving up" on partnership.

B. Differing opinions are fully explored at staffings.

As demonstrated by any one or more of the following:

- Sometimes families and districts bring personal advocates or representatives to staffings.
- Families and educators communicate ahead of time when an additional representative will be attending.
- Families and educators attempt to resolve conflict at the building or district level.
- Families and schools feel free to use mediation, due process, and complaint procedures.

VI. *Family/educator partnerships acknowledge diversity in religion, culture, ethnicity, and values, and how these influence interaction and communication.*

As indicated by the following:

A. Educators and families acknowledge and respect each other's position in the child's life.

As demonstrated by any one or more of the following:

- Since the family has a lifelong commitment and responsibility to its child, its beliefs and values must be recognized and considered in decision-making for programming and placement.
- Information is provided to educators and families on the recurring grief process that parents, siblings, extended family, teachers, and the child experience.
- Families are aware of the extended role of the educators with students at the building and district levels and the stress that occurs when balancing professional and personal lives.

B. Educators recognize and respect the ethnic, cultural, and religious backgrounds of families.

As demonstrated by any one or more of the following:

- Interpreters/translators are provided for school meetings, staffings, and workshops when appropriate.
- Special cultural or religious holidays are acknowledged.
- There is not an over-representation of any minority group in special education.
- A variety of cultures and ethnicity are represented on district task forces, decision-making bodies, and the Special Education Advisory Committee.
- Families and educators are aware that language communication styles and behaviors may vary from culture to culture.

Students with ADD who qualify for special education need support from home, school and the health care community. The philosophy described here provides a foundation upon which to develop parent-professional partnerships necessary for effective treatment of ADD.

CHAPTER 7

Understanding and Working with the Families of Children with ADD

The purpose of this chapter is to provide the parent's perspective on ADD and to suggest methods for building partnerships between parents and educators to help the child with ADD become a successful student.

This chapter is based on my experiences over the last 12 years as the parent of a child with ADD. The first six years were spent struggling and searching for answers prior to the diagnosis of my youngest son. These years were an emotional roller coaster, as I tried to find an explanation for my son's erratic, demanding, and provocative behavior. I spent the next six years learning how to help my son escape criticism and rejection and become a successful and accepted student.

The formal diagnosis of my son with ADD represented an important turning point in my life and his. The diagnosis came only after a long and painful search that included consultation with a great number of medical professionals. By the time my son was finally diagnosed he was in crisis, my marriage was stressed, my other children were confused, and I was overwhelmed and shell-shocked.

The diagnosis itself brought a sense of relief, but I found parents and educators unfamiliar with ADD and untrained in assisting students with the disorder. I began an exhaustive search for information about and methods for helping children with ADD. I was surprised to find an absence of current literature on ADD. I found that answers lie in early identification and extensive cooperation among parents, schools, and health care professionals.

The Importance of Early Identification

Early identification and treatment of ADD is of the utmost importance because it has a direct impact on the future success and failure of these children. The home, school, and social life of a symptomatic but undiagnosed child with ADD can be unfriendly if not downright hostile. During the pre-diagnostic phase, parents and teachers continually ask

these children to diagnose themselves. "Why can't you pay attention?", "Why can't you keep your hands to yourself?", "Why can't you learn to raise your hand before you talk?", "Why are you always losing things?", "Why are your papers such a mess?", "Why can't you ever finish anything?", "Why can't you sit still!?"

The children do not know the answer. What they do know, and what is constantly reinforced, is that they are big disappointments to others. They learn that they cannot do much of anything right. Self-esteem drops quickly. Children with ADD often develop secondary emotional problems that are compounded by a delayed diagnosis. We also know that youth with ADD are at an extremely high risk of academic failure. Current statistics show that despite average to above-average intelligence, young people with ADD stand a one in three chance of not completing high school. Of the 20 percent who attempt college, only five percent will successfully complete their post-secondary education (Barkley, 1992).

Therefore, the first step in the parent-educator partnership is assisting in the diagnosis of ADD. Teachers must be alert to the manifestations of ADD in the classroom so that steps can be taken early to break the pattern of failure. When teachers find themselves asking the "Why can't you?" questions, they may have taken the first step in the identification process. A pre-referral meeting with the parents should be requested and the purpose of the meeting fully explained. If an atmosphere of cooperation between parents and educators can be established at this early stage, it will provide the working foundation for all future interactions as the student progresses through school.

Another difficulty that arises from failure to identify ADD is that teachers and parents waste precious time and energies in applying the wrong teaching management strategies. This frustrates and demoralizes even the most dedicated teachers and parents. Parents may rationalize that their child would be just fine if he had a different teacher or were in a different school. Teachers may believe that the child is "no good" or that they are inept at their job.

Finally, early identification is important because it gives students a head start in developing the kinds of advocacy skills he or she will need to complete his or her schooling. Students with ADD need to know the specific areas that require extra effort on their part. This knowledge enables

them to take some responsibility for their own development and progress. Students with ADD also need to know to whom they can turn within the school for support when they are frustrated and need help. Learning when they need assistance and how to go about getting that assistance are important skills for students with ADD.

Labeling

A popular trend in education is to avoid "labeling" children. This trend has worked against the timely identification of ADD. While most children with ADD can be accommodated and served in the regular classroom, the special services such children need in school are generally not provided unless the child has been "labeled." Some parents of ADD children have been warned by school staff that "labeling" may hurt their child. Those parents who understand how the special education and regular education systems work are placed in a "Catch 22" situation. If they decline to have their child evaluated because they fear the label, their child will not be labeled, but will also not be eligible for special education and related services.

The primary concern seems to be that the label itself will have a negative impact on the child. My experience with children with ADD is that they know they are different, but they do not know why. In the absence of a diagnosis or an explanation, these children begin to make some very negative assumptions about themselves. Their uninformed view of themselves is that they are bad, stupid, and lazy. More than anything else, children with ADD want to be accepted and appreciated by their peers. Children with ADD are often ostracized by their peers because of their social immaturity, not because they are labeled or not labeled. Children also take their cues from the adults around them; teachers who demonstrate a caring and positive approach to dealing with the ADD child's difficulties are imitated by their students in the same way that teacher rejection and frustration are modeled by the ADD child's peers.

Parents of children who have ADD are particularly concerned about "mislabeling" of children to qualify for special education help. While parents do not relish the idea of a label, they do have a serious problem with schools that refuse to use the ADD label or insist upon labeling the ADD child with an inappropriate disability label. Knowledgeable parents want the label to fit the child and not vice versa. Parents would like for others

to view the label of ADD in the same way as they view other children with health impairments. No one would dream of discouraging a parent from labeling a child with diabetes or asthma for the purpose of helping the child, and no one would suggest mislabeling a child with asthma as having diabetes. (For information on how children with ADD may qualify for special education, see Section II, Chapters 3 and 4.)

The Identification Process

Parents rely on two primary sources in the community to alert them that a developmental problem or disability is suspected in their child. The first source is the family physician or pediatrician. Unfortunately, most physicians do not specialize in the assessment and treatment of developmental and behavioral problems in children. Routine and brief visits to the family doctor are not likely to result in early identification of ADD because children with ADD may not exhibit their symptoms in this novel setting. Instead, significant differences between children with ADD and their peers most commonly come to light when teachers begin to report difficulties in the elementary school years. Teachers and parents sense that the child is not producing school work or grades that reflect the child's true potential.

Teachers are in a better position than parents to identify when a child's behavior is developmentally inappropriate because they have a larger pool of children that are the same age with which to make comparisons. The importance of the classroom teacher in assisting in the identification of ADD cannot be over-stated. Teachers, however, need the active support of school administrators in order to be proactive in responding to students with attention problems.

Parents need schools to be open and clear regarding their roles in the identification and evaluation of students suspected of having disabilities. A brief explanation of the child's rights under IDEA and Section 504 of the Rehabilitation Act of 1973 should be offered. (See Section II of this book.) Written literature may also be offered to augment the verbal explanation.

Sharing this kind of information is important from a legal standpoint, but its most valuable aspect is the positive effect it has on the school-parent relationship. Openly discussing this complicated topic shows respect

for the child's parent(s) or guardian. Open discussion also says to the parents from the start that the school professional considers them to be partners in determining what is best for the child educationally. Failure to be open about the referral process and the child's educational rights leads to a strained and adversarial relationship. Recent clarification of the rights of children with ADD to a free and appropriate education under federal and state laws has also created the expectation of help. Parents are looking to schools for specific help in educating their youngsters with ADD.

Some parents may not be aware that ADD is a medical condition as well as a learning disorder. Coordination of a school assessment with medical evaluation is the best practice. The medical evaluation is the responsibility of parents and should be conducted at the same time a school evaluation is done. The medical evaluation should be performed by a knowledgeable physician to identify any organic causes of the ADD symptoms and to identify and treat other medical conditions that may accompany the disorder. ADD support organizations frequently have referral information regarding local physicians and psychologists who specialize in the assessment and treatment of ADD.

When schools have completed their evaluation, the parents should be told what the school can and cannot realistically do for the child. Students with ADD who are not impacted severely enough to qualify for special education services may or may not need additional education support outside of school to prevent failure or poor progress in school. Parents should be encouraged to utilize all resources and other professional services available to help children with ADD.

Accepting the Diagnosis

The parents of children with ADD go through the same grieving stages as any parents who must accept that their child has a disability. Children with ADD also go through this process. How long the process takes will vary with every family, and not everyone goes through the stages at the same rate.

These stages include the emotions of denial, anger, guilt, blame, confusion, depression, and acceptance. The process is unique in the case of ADD and is complicated by several factors. The unique feature is that most parents are at least in part relieved to have the diagnosis: they

finally have an understanding of why their child has been so difficult to raise. They are also encouraged by the news that they did not cause their child's ADD and are not "bad parents."

The biggest obstacle to the goal of helping parents pass through the grieving stages is how the disorder is perceived. Because ADD is an invisible disability, parents are not afforded the degree of support available to parents who have children with obvious disabilities. In addition, the prevalent myth in our society that all behavior is under the voluntary control of the individual serves to undermine the grieving process. Parents of children with ADD are very likely to encounter people, including teachers, who do not believe that ADD is a legitimate and real condition. All of these inaccurate views and beliefs contribute to denial, which is a major stumbling block to accepting and treating the condition.

Another stage parents encounter is characterized by anger, guilt, and blame. Prior to the diagnosis of ADD, parents have usually spent a significant amount of time blaming each others' parenting styles for the child's difficulties. It usually takes some time to let go of this blame and to redirect new energy toward helping the child.

Confusion is a very common state for parents because ADD is such a complicated condition to understand, and because it most often manifests itself in combination with other conditions. Sorting out what the associated conditions are and deciding what treatment options to choose are particularly difficult for parents. Adding to the stress is the fact that some of the treatments for ADD are controversial. Parents need good, up-to-date information, patience, and time before a clear picture of ADD is likely to form in their minds.

Educators should be aware that parents—particularly mothers—may be depressed (McKinney, 1993). This emotion relates directly to the stress of being a parent of a hyperactive child and to the level of chaos that characterizes family life. It is not uncommon for mothers to break down and cry during school pre-referral and staffing meetings, for this is a natural response to grief. It's a good idea for educators who are present at such a meeting to repeat their impressions of the meeting with the parent when the parent is more composed to confirm what was agreed upon.

Educators should also understand where parents are in the grieving process because it will influence how parents communicate with school staff. Parents who are further along in the grieving process will be in a better position to work collaboratively with the school team. Attendance at parent support group meetings helps many parents work through these stages.

Schools can help by making space available for meetings and by placing ads in the school newsletter to let interested parents know when the groups meet. The participation of school support staff and teachers at local meetings also enhances the relationship between parents and schools and should be encouraged. Parents of children with ADD need to feel that they are members of a caring community. Letting parents know that you value their child and that you are optimistic that educational progress can be made helps them accept their child and also makes them feel better about themselves.

Educating Teachers and Parents about ADD

Teachers and parents need to learn how ADD manifests itself before they can develop joint plans to help children with ADD achieve success at home and school.

Much of the frustration parents and teachers experience stems directly from a lack of knowledge about the condition. It is the continual insistence that students with ADD perform at age-appropriate levels that causes the most frustration. Students with ADD have more difficulty than their peers in areas of development related to self-regulation, including the ability to organize themselves, persist in tasks, and inhibit impulsive behavior. When parents and teachers understand that the child is developmentally behind in these areas, they can adjust their expectations accordingly. Without this understanding, parents and teachers tend to harbor negative thoughts and attitudes that interfere with their ability to form a positive working relationship with the student and with each other.

Establishing Good Communication Between Home and School

Communication between parents and schools is key to the educational success of all students. Regular communication is essential in the case of students with ADD because of the degree of difficulty they are likely to have in meeting school standards for academic performance and in complying with school discipline codes. Getting parents to feel comfortable is the first step in establishing good communication. Parents of students with ADD are very sensitive to hearing criticism and complaints about their child. One parent lamented at a parent support group meeting that her child's school once presented her with a five-page report of everything her child had done wrong in the last 48 hours! Her eyes filled with tears as she said, "I would have given anything if they had said just one nice thing about my son, even if it was only to say he has pretty eyes."

Parents respond best to school communications when they are delivered in a non-judgmental way and when the school limits its calls or written reports to matters that truly need the attention of parents. Parents of children with ADD are frequently operating in a crisis mode. Repeated contacts with school staff of the "Please see that your child stops doing this or that right away" variety are very stressful for parents who may or may not be able to correct the problem overnight. Parents are also in a better position to handle bad news if the news is accompanied by a suggested problem-solving approach. This gives the parent and the school staff something positive on which to focus and makes the problem seem much more manageable.

Parents of children with ADD often need encouragement to come to the school and to get involved. They may be embarrassed by reports from the school of their child's inappropriate behavior. Efforts to let them know that their participation in school activities and functions is welcome make them feel more accepted. Observing their child at school is sometimes an eye-opening experience for parents because children with ADD may act quite differently in the home and school settings. This experience gives parents the benefit of seeing their child from the school's perspective and helps to bridge the gap between their perceptions of the child and the school's perception.

Developing Proactive Plans for the ADD Student

An initial meeting between parents and teachers at the beginning of the school year is most helpful in establishing how they will communicate and how often the communication will take place. At this time, parents and teachers can discuss mutual goals for the new school year. Parents may need some coaxing to talk about the areas in which their child has the most difficulty. They want the teacher to like their child and are afraid that if they acknowledge problem areas the teacher will form a negative opinion of their child or of their parenting skills.

Identifying problem areas in advance allows the parent and the teacher or team of teachers to develop proactive plans *before* major problems arise.

Parents are most concerned that their child will be penalized for exhibiting symptoms of his or her disorder. Strategies and plans that take into account the child's weak areas and that build incentives and rewards for *any* improvement set everyone up for success rather than failure.

Discipline issues tend to dominate much of the communication between parents, teachers, and school staff. Planning ahead in this area is critical. Tensions can build up to an intolerable level when teachers are not given the help they need to deal with disruptive student behaviors. Students with ADD typically do not do well when customary discipline plans are used. A plan that includes positive reinforcements must be in place in order for punishments to work. Parents and teachers must make sure that they are teaching the child HOW to behave and are not simply punishing the child for misbehavior. Improvements in behavior can be magnified when they are reinforced by both teachers and parents.

Parents of children with ADD often fear that their child's grades will suffer because of poor listening skills, poor organizational skills, and poor fine motor coordination. Common problems that students with ADD have in these areas result in comments like, "I didn't do the correct assignment because I didn't hear what it was," "I didn't turn in my homework because I left my book at school or I left my assignment at home," or, " I was not given full credit on the papers because my handwriting is hard to read."

Some teachers feel that accommodating the student with ADD by providing them with extra support would be unfair to other students who do not receive this support. It's important to note that the requirements can stay exactly the same. What is being changed is the degree of support available to enable the child to meet the requirements. Checking to see that the child with ADD recorded the correct assignment, letting the child keep an extra set of books at home, and allowing the child with handwriting difficulties to use a computer are no different than allowing a child with a visual impairment to wear glasses so he or she can see what's written on the blackboard. Teachers who are willing to make accommodations and adjustments so that the child with ADD can be successful create a partnership that is satisfying for everyone involved.

This chapter was written by Pamela Murray. She is the founder and president of Attention Deficit Disorder Advocacy Group (ADDAG), the first support group in Colorado for families affected by ADD. ADDAG is nationally recognized as a leader in advocating for ADD students in schools. Pamela is also past president of Attention Deficit Disorder Association (ADDA), a national parent support organization.

References

Barkley, R. (1992). *ADD/ADHD in the 90's: Progress in the multimodal management of attention deficits.* ADDA Conference, Valparaiso, IN, March, 1992.

McKinney, J. D. (1993). *Synthesis of research on the assessment and identification of students with Attention Deficit Disorder.* Miami: University of Miami, ADD Assessment Center.

CHAPTER 8

Health Care Resources

The Health Care Community

Students who have attention problems and/or who have been identified as having ADD may have specific health needs. It is important for these students to have access to services from the health care community when it is necessary to determine: 1) if the student has a medical condition that might be associated with the attention difficulty; and 2) whether pharmacological intervention is indicated.

For purposes of this section, the term "health care community" includes all health-related services, such as physicians, public and private clinics, county health nurses, and/or organized health departments. Figure 8-1 is a flow chart illustrating how health care services may be accessed.

As indicated in Figure 8-1, students with a potential attention problem and/or ADD may be identified by the family or by school, social services, or mental health personnel. When someone other than a family member identifies a health care concern, the parents/guardian should be notified and provided with information about services available in the community and how to access them. The parents/guardian may then decide on the best way to proceed.

It is important that everyone who is involved with students with attending problems be alert to the possibility that these students may need health care services.

When a child's parents/guardian choose to seek assistance from a health care provider, the first step is to begin a health assessment (Figure 8-1). The purpose of the assessment is to identify the concern(s), rule out other physical or mental health problems, and determine health-related needs (environmental, social, pharmaceutical). In order to complete this assessment information is needed from:

- Parents/guardians about family history, concerns, and the student's behavior;
- Educators about academic and social skills and functioning; and
- The school nurse about health information and functioning.

This information exchange occurs through an ongoing, two-way process and is essential for accurate and helpful assessments. It's important to remember that information may be exchanged only with written permission from the student's parents/guardian.

When the health assessment is finished, the health care provider should contact the school in order to develop plans to help the child. Once again, this is done only after obtaining written permission from the student's parents or guardian. If the child is very young (birth to six) the school contact goes through the community Child Find Team. If the student is in grades one to 12, the contact is made to the school principal, who informs the school nurse and the student's teacher(s).

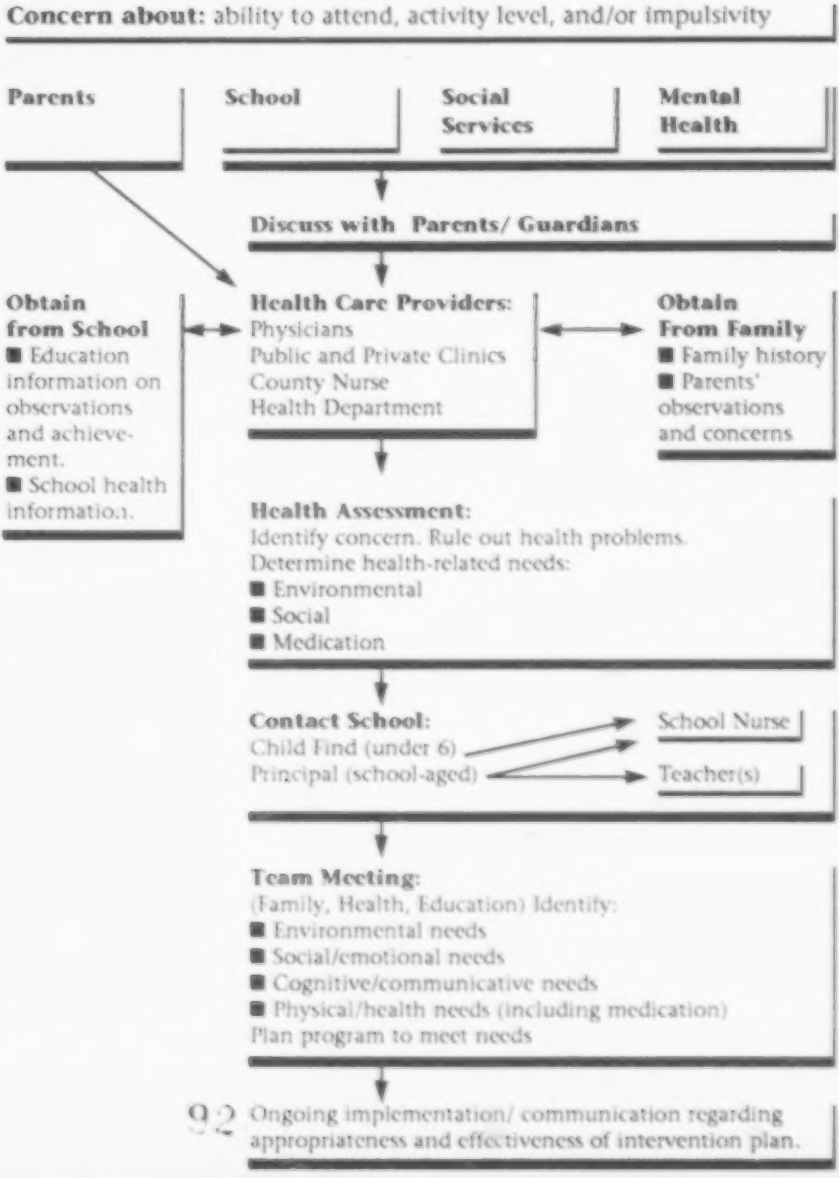
In some cases the next step is to have a team meeting involving family members, health care professionals, and educators to discuss the student's environmental, cognitive-communicative, social-emotional, physical, and possible medical needs (Figure 8-1). Based on the student's needs, the team may develop a plan focused on helping the student be successful in the school, home, and community.

It is essential to have a process to ensure ongoing communication with the team regarding the appropriateness and effectiveness of the plan. This process can be beneficial for all by providing continuity of care and services for the student and by promoting efficient coordination among those who are responsible for services. Many schools use strategies such as a weekly telephone call home from the teacher, daily behavior checklists sent home, occasional diary entries by teachers noting student behaviors that may be exceptional, and logs for administering medication. It's important to identify specific communication strategies that are time- and cost-efficient but that will allow health care professionals and parents to know what is happening at school. In addition, it's important for educators to know of any changes in treatment by health care providers. If a school nurse is available, he or she should be the liaison between the school and the health care providers.

Not all students with attention difficulties have specific health needs, of course. However, when students have needs that require treatment from health care professionals, it is important that they have access to appropriate services and that there is communication among all involved. Educators and health care providers have a responsibility to see that par-

FIGURE 8-1

Health Care Providers' Response to Students with Attention Difficulties



Educators and health care providers have a responsibility to see that parents know about appropriate services and that important information is shared.

The following section provides information about services available through Colorado's Handicapped Children's Program Clinics. These clinics can provide valuable evaluation and treatment for some students with attention difficulties.

The Colorado Department of Health

The Handicapped Children's Program/Children with Special Health Care Needs (HCP/CSHCN) sponsors specialty clinics throughout the state. The purpose of the clinics is to provide specialty care to children whose families would otherwise not have access to this type of care. Eligibility is determined by guidelines established by the program. Selected conditions related to the following medical specialties may be eligible: neurology, orthopedic, gastrointestinal, plastic surgery, hearing conservation, vision conservation, rehabilitation, cardiac, neurosurgery, and pediatric.

With the exception of Denver County, HCP/CSHCN referrals are made through the public health nurse. Staff in the State HCP/CSHCN office assist with referrals for Denver County clients. The role of the public health nurse in all agencies is to assist families with information and referral. Since resources for both primary and specialty care vary from community to community, it is appropriate to ask the local public health nurses to assist school personnel as well as the family in finding local diagnostic and treatment services for a child.

The public health nurse will work with school personnel to determine whether or not a child is eligible for services through the HCP/CSHCN clinics and will assist in scheduling the child to the appropriate clinics. Appendix B contains a list of County Nursing Services and/or Health Departments.

Prior to a referral to an HCP/CSHCN specialty clinic, the school should provide the family with all the information the school has acquired through formal and informal assessment and observation. It is recommended that a child be evaluated by his or her primary care provider

vices in HCP/CSHCN clinics; however, it should be noted that children are scheduled to all the clinics on the basis of medical severity.

Developmental Evaluation (D & E) Clinics are also available throughout Colorado. Although the sponsors vary, services are essentially the same at all of them. The evaluation at these clinics includes an assessment in some or all of the following areas: physical, neurological, gross and fine motor, speech/language, developmental psychological, cognitive, emotional, audiological, and family assessment.

Children with the following conditions are eligible for referral to D & E clinics:

- Children with delays in two or more areas;
- Children with high-risk birth history or trauma;
- Children with multiple handicapping conditions;
- Children from a high-risk environment such as failure to thrive, abuse, neglect, or the mother's use of alcohol during pregnancy;
- Situations in which differential diagnosis is necessary for medical and/or educational programming; and/or
- Children who are not making progress in appropriate therapeutic programs.

Each D & E Clinic throughout the state has developed an individualized intake process. Information regarding referral to a specific clinic can be obtained by contacting that clinic's coordinator. Addresses and phone numbers for the clinics are listed in Appendix B.

SECTION IV

Intervention Strategies

This section is devoted to intervention strategies that are useful in school and early childhood settings. Rather than merely providing a list of activities to use, the three chapters in this section provide a framework for thinking about what students with ADD need so that the suggested strategies may be carefully chosen.

Chapter 9 outlines an intervention framework for children three through five years old. It is based on a developmental philosophy that is the basis for effective early childhood education: all interventions for young children must be age- and individually appropriate. This framework outlines what adults can do and think in order to *facilitate* what the child learns. This means that the environment is carefully constructed to reflect what children of that age need and to allow for each child's specific needs. Then all children are encouraged and guided to develop the skills they need. By focusing very intentionally on specific aspects of the environment adults can increase successful learning for young children with attention problems.

Chapter 10 provides a framework for students in grades one to 12. The emphasis in this chapter shifts slightly to include not only what educators can do and think, but also what they *teach*. The reason for this shift is that as students' cognitive skills develop so does their ability to think about their thinking. Students with ADD need to be taught skills to think about their thinking in order to be more efficient learners and effective do-ers. Thus, it is important to not only facilitate student learning but also to specifically teach skills which these students may not learn without specific instruction.

Chapter 11 presents several areas in which a total school response is needed. By developing systems, schools can respond efficiently to the needs of students with ADD.

All three chapters in this section present frameworks and practical suggestions for educators to use with students with ADD. They reflect a problem-solving model for thinking about ADD which is both practical and helpful.

95

FIGURE 9-1

Strategies for Intervention

Cognitive/ Language
- attention
- listening
- impulsivity
- organization

Emotional
- sense of self
- affect

Physical/ Motor
- motor skills/ planning
- sensory integration
- space
- activity level

Social
- peer relationships
- interaction with adults or other authority figures
- response to new situations
- transitions
- group skills
- play skills

CHAPTER 9

Interventions for Young Children (Ages 3-5)

This chapter contains suggestions for use with young children who have attending difficulties. It reflects a framework that takes into account both age appropriateness and individual appropriateness (see Section II, Chapter 3). Thus, suggestions are based on the typical needs of children three to five years of age and on the unique needs of children with attending difficulties.

Considerations

The interventions suggested here are based on several important considerations basic to early childhood education:

- The goal of interventions designed to meet the needs of three- to five-year-olds with attending problems is to help them develop internal self-control.

- The intervention strategies are helpful for all young children, but when used frequently and consistently they are especially helpful to students with attending difficulties.

- Strategies chosen for specific children should be used in all contexts of that child's environment.

- The strategies should be used by all adults who relate with the child.

- Communication and collaboration are essential to successful use of these intervention strategies.

The following intervention strategies reflect a developmental "whole child" approach to serving young children with attending difficulties (Figure 9-1). The developmental areas are identified and defined. Key skills or behaviors which may need special consideration when working with young children with attending difficulties are listed in each area. For each of these key skills or behaviors, strategies are suggested to assist adults so that they can help young children understand themselves and successfully manage their own learning and behavior.

97

COGNITIVE/LANGUAGE
(The way a child thinks and communicates)

ttention

Attention is a function of self-control and the ability to ignore distractions.

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ It takes more energy to attend than it does to complete the task. ■ The child's behavior may change due to fatigue from attending. For example, the child may choose to leave a table and participate in a gross motor activity. ■ Attention is improved when a child is relaxed. ■ Brief activities result in greater learning. ■ The child may demonstrate significant gaps in reasoning and concept development which are not a function of actual cognitive ability.	■ Establish eye contact before giving directions. ■ Provide frequent breaks. ■ Minimize visual and auditory distractions, e.g., ❑ Reduce room clutter, ❑ Use an auditory trainer, ❑ Provide white noise, and ❑ Provide a quiet area. ■ Include relaxation activities, e.g., ❑ Play instrumental music, ❑ Use imagery, ❑ Apply firm but comfortable pressure, ❑ Read to child, ❑ Rock child in slow, rhythmic manner, and ❑ Hold gently, firmly. ■ Keep tasks and activities brief. ■ Break down tasks (goals) into smaller steps. ■ Use visual cues (i.e., sign language, pictures, gestures) and pair with key words. ■ Provide frequent, functional opportunities to learn and practice concepts and vocabulary which are missing.	■ Sustain attention long enough to be available for learning.

98

COGNITIVE/LANGUAGE
(The way a child thinks and communicates)

istening

The ability to receive and process auditory information.

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ Attention is a pre-requisite for listening. ■ The number of instructions, steps in tasks, proximity, and position of adult in relation to the child are important when giving directions. ■ Child's posture and expression may not indicate his/her actual level of listening and attention. ■ Body positions appropriate for the activity and a feeling of being grounded enhance the child's ability to attend.	■ Review strategies for maintaining attention. ■ Provide appropriate support for body positions as needed, i.e., cube chair, bean bag chair, feet on the floor. ■ Provide preferential seating, i.e., ❑ Use semicircle for group activities in order to maintain better eye contact, and ❑ Position good role models on both sides of child. ■ Use short, one- to three-part directions, depending on needs of child. ■ Encourage child to repeat back directions, orally or gesturally. ■ Provide teacher modeling of self-talk to review directions. ■ Use key words (i.e., focus, 1-2-3, look, listen) and pair with visual cues.	■ Utilize effective attending skills to facilitate listening and to process information.

99

COGNITIVE/LANGUAGE
(The way a child thinks and communicates)

mpulsivity

The response to an internal or external stimulus without sufficient thought.

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ Due to the nature of attention difficulties, the child often is unable to control his/her behaviors and actions.	■ Provide clear and consistent choices and consequences.	■ Reduce dependence on external controls as internal self-control matures.
■ The child may not have a clear understanding of cause-effect relationships.	■ Provide opportunities to play with cause-effect toys and activities.	
■ The child may have difficulty understanding limits and how they apply to him/her.	■ Verbalize connection between behavior and outcome.	
	■ As developmentally appropriate, use a stop-think-do approach to activities.	
	■ Frequently offer reminders of established rules and limits.	
	■ Include child in establishing rules.	

100

COGNITIVE/LANGUAGE
(The way a child thinks and communicates)

rganization

Includes the ability to makes choices, complete tasks, and alter a plan.

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ The child's organizational abilities may fluctuate and affect behavior and daily performance.	■ Include child in creating daily routines, when possible. ■ Provide consistent daily routines. ■ Use pictures/photos to plan sequence of daily activities. ■ Periodically refer child to visual schedule to assist with transitions. ■ Review completed sequence of daily activities as often as needed for individual child. ■ Establish consistent process for making choices, such as picture board, choice wheel, and concrete objects to represent centers or activities. ■ Limit number of options to choose from, as needed. ■ Clearly define beginning and ending of tasks, adjusting limits as needed. ■ Provide immediate encouragement and feedback at each step of a task and/or activity. ■ Allow opportunity for child to make changes and alter plan. ■ Use behavioral reinforcers (if needed), e.g., sticker charts, hand stamps, and special privileges.	■ Use basic organizational skills, which include making choices, planning, sequencing, task completion, and adaptability.

101

PHYSICAL
(The way a child moves)

otor skills/ Planning

Activities that involve movement & the process of controlling the body.

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ There is a fine line between a child who is awkward or clumsy because he/she isn't paying attention and a child who has difficulty with motor planning.	■ Prepare child using calming or arousal techniques before beginning activities requiring motor planning. ■ Physically "walk" through the desired activity, after initial demonstration. ■ Use a hand-over-hand facilitation to assist with movement. ■ Tape "footsteps" or a line to the floor to plan movement between spaces. ■ Model use of self-talk while demonstrating motor skills. ■ Provide obstacle courses to practice motor planning skills.	■ Participate successfully and safely in a variety of motor activities.

PHYSICAL
(The way a child moves)

ensory Integration

Ability to organize input of senses & their relationship to physical actions.

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ A child with attentional difficulties and a child with poor sensory integration share many similar characteristics.	■ Provide a quiet, comfortable space with a variety of tactile and sensory materials (e.g., large cardboard box, tent, tube, etc.).	■ Organize sensory input and request and use self-calming strategies.
■ The child may not be adequately receiving and/or interpreting feedback from his/her environment.	■ Encourage child to request self-calming sensory activities (e.g., cool water play, lotion, soft bristle brushes, etc.).	
	■ Use firm but *comfortable* amount of pressure to the child to enhance focus.	
	■ Allow the child to use a variety of body positions (such as sitting astride a chair with the back between his/her legs, standing, kneeling, and using a bean bag chair).	

103

PHYSICAL
(The way a child moves)

Space

The relationship of the child to his/her environment.

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ The child may have difficulty understanding boundaries and personal space. ■ Clear boundaries provide the child with feelings of security and safety.	■ Provide tangible markers to help define personal space for the child (e.g., carpet squares, taped lines, and chalk). ■ Give visual cue of outstretched arms to give a sense of personal space. ■ Use key word like "space" or similar phrase to help the child negotiate personal space. ■ Create a consistent place for each child's personal belongings, using child's picture, name, or symbol to label.	■ Recognize and respect own and others' personal space.

PHYSICAL
(The way a child moves)

ctivity Level

Intensity of the child's involvement with people, materials, or environment.

ADULTS THINK

- Attentional difficulties may or may not be accompanied by a high rate of activity.
- It takes more energy to sit still than to move around.
- The child's activity level is generally not under his/her control.
- The child's activity level may be the most prominent characteristic, but not necessarily the most important one.
- Artificial lighting can affect the child's behavior or activity level.
- High pitched sounds, sometimes inaudible to others, can affect the child's ability to attend.

ADULTS DO

- Give simple directions and set space boundaries when introducing activities and setting expectations.
- Observe and recognize the child's patterns of activity that typically lead to conflict, and use strategies to redirect those patterns before child loses control.
- Give visual and auditory cues to help the child monitor his/her activity level (e.g., rhythmic music, key words, private signals, concrete objects, and picture cues).
- Use behavioral strategies, such as charts, stickers, etc., as needed.
- Provide frequent and specific acknowledgment of appropriate activity level.
- Maximize use of natural lighting.
- Alternate periods of quiet activity with periods of movement.
- Create special jobs for child which require movement (e.g., messenger, helper, go-fer).

CHILD LEARNS TO

- Recognize and demonstrate an appropriate activity level in a given setting.

105

SOCIAL
(The way a child interacts with others)

eer Relationships

The interactions of the child with other young children.

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ The child wants to be friends with other children, but may not know how to do this.	■ Provide cueing for appropriate eye contact and body positioning.	■ Appropriately acknowledge others.
■ Child's actions may seem to contradict true desire to make friends.	■ Demonstrate social interactions by modeling.	■ Make friends.
	■ Give immediate feedback on successful interactions.	■ Think of him/herself as a leader as well as a follower in interactions with peers.
	■ Create opportunities for child to initiate interactions.	
	■ Pair child with an appropriate peer.	

SOCIAL
(The way a child interacts with others)

Interactions with Adults
and other authority figures

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ The child basically desires adult approval and acceptance.	■ Respond quickly and directly to the child using specific language.	■ Develop positive relationships with adults.
■ Be alert to signs of stress and changes in behavior.	■ Provide anxiety- and stress-reducing activities.	■ Transfer parental authority to another adult.
■ Adult response does impact the child's self-esteem/ confidence.	■ Encourage many opportunities for communication.	■ Cooperatively respond to others' requests.

107

SOCIAL
(The way a child interacts with others)

esponse to New Situations & People

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ There are many settings and people involved with the child on a daily basis. ■ This variety of people and situations can be especially difficult for this child.	■ Prepare the child for new situations and people (e.g., provide advanced discussion, pictures, videos, story books related to the new situations, people). ■ Try to provide consistent expectations and follow through by providers in all settings. ■ Establish consistent communication system across all settings (e.g., back and forth book with parents, telephone calls, scheduled meetings, audio tapes). ■ Bring "comfort item" or family pictures from one setting to another when needed.	■ Access strategies to adjust to changing situations.

108

SOCIAL
(The way a child interacts with others)

ransitions

Significant changes within an environment or among different environments.

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ Within known daily routines, there are also many transitions made.	■ Provide preparation/ warning of change or next activity.	■ Accept and make transitions with minimal assistance.
■ Some children need more or less advance preparation/warning than others.	■ Include details in explanation without overloading the child.	
■ A child with attending difficulties may need more advanced preparation and warning.	■ Give periodic reminders based on individual needs.	
	■ Use visual and auditory cues.	
	■ Encourage use of object or comfort item carried to bridge one activity to another as needed.	
	■ Pair child with an appropriate peer during transition.	

109

SOCIAL
(The way a child interacts with others)

Group Skills

Group interaction skills in more adult-initiated or adult-structured activities.

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ It takes different energy to be with others than to be alone.	■ Give multi-sensory directions and demonstrations.	■ Participate in structured group activities.
■ Age and developmental levels of child are critical when setting expectations.	■ Include physical movements in activity.	
	■ Model several acceptable body positions and allow for position changes within the activity.	
	■ Allow the child to join an activity later or leave activity earlier if necessary.	
	■ Provide flexibility with respect to proximity of child to group and/or adult.	
	■ Use tangible markers to help define personal space for the child (carpet squares, tape, chalk).	

110

SOCIAL
(The way a child interacts with others)

Play Skills

Group interaction skills in more child-initiated, less-structured activities.

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ Play is a child's work.	■ Model positive ways to initiate and terminate play.	■ Make choices and plan activities.
■ Particular toys/materials can encourage interaction.	■ Provide appropriate materials, equipment, and toys which encourage interaction.	■ Participate in developmentally appropriate level of play.
■ It takes more energy to share and take turns.	■ Supply multiples of popular toys.	■ Share materials, take turns, and participate in clean-up activities.
■ A child's interest in playing with others may vary from day to day.	■ Actively involve adults in play facilitation.	
	■ If needed, provide time limits for use of toys, possibly using a timer.	
	■ Assist child in making a plan by reviewing choices.	
	■ Use visual cues to represent choices (e.g., pictures or objects that represent the things being chosen).	
	■ Limit the choices available.	

111

EMOTIONAL
(The way a child feels about self and others)

Sense of Self

The way in which a child perceives himself or herself.

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ The child is probably feeling, at some level, that he/she is different.	■ Redirect behaviors by positively stating alternatives.	■ Take reasonable risks.
■ Singling out the child by name or comment may be a powerful reinforcer, but for children with low esteem, it may have a negative impact.	■ Monitor tone of voice, choice of words, and non-verbal communication.	■ Accept praise, correction, and suggestion.
■ Adult responses to child's behaviors are also models for his/her peers and other adults in the setting.	■ Develop specific, private cueing system between adult and child to monitor behavior.	■ Demonstrate a balance of comfort being with self and/or others.
■ Accepting praise can sometimes be difficult and may trigger challenging responses.	■ Model positive self-talk.	■ Recognize own strengths, challenges, preferences.
■ The child has probably received more negative than positive messages in his/her experiences.	■ Comment specifically on tasks or activities without conveying value judgments.	■ Monitor his/her own feelings and behaviors.
	■ Target specific activities which enhance self-esteem for all children, such as: "Child for the Day," "Warm Fuzzies," "All About Me."	
	■ Restate and validate child's choices.	
	■ Schedule private time with the child as a support mechanism.	
	■ Use encouragement and focus on the process of learning rather than the product.	

112

EMOTIONAL
(The way a child feels about self and others)

Affect

The child's visible reaction to a situation.

ADULTS THINK	ADULTS DO	CHILD LEARNS TO
■ The child's outward expression may not accurately reflect his/her inner feelings.	■ Use reflective listening, label feelings within a meaningful context and check back with child for agreement.	■ Recognize a range of feelings.
■ Some children may demonstrate over-arousal of emotions and quick mood swings.	■ Model by labeling adult's own feelings.	■ Appropriately match feelings with behaviors.
■ Limited affect can be as much of a concern as a child with too much affect.	■ Teach 'feeling' words vocabulary.	■ Modulate expression of these feelings.
	■ Give opportunities during the day when feeling expression needs to be less under control (i.e., screaming on playground).	■ Accurately interpret social information in a manner relative to the situation.
	■ Provide options for releasing emotional overload (active play, pounding) or participating in self-soothing activities (water table, painting).	■ Access techniques/strategies to self-soothe.
	■ Teach self-soothing/calming techniques.	
	■ Explore to seek clarification from child of his/her perception of what happened (tell me what happened).	

113

CHAPTER 10

Interventions for Students in Grades One through 12

Considerations

Before determining specific strategies for students with ADD, it's important to consider several assumptions that form the basis of a decision-making framework:

■ Attending problems may be attributed to many causes in addition to ADD. These include language deficits, perceptual problems, depression, stress-induced anxiety states, biologically-based anxiety disorders, child abuse or neglect, bipolar disorders, schizophrenia, or medical disorders (sleep disorders, malfunctions of the thyroid gland, excessive lead ingestion). Attending difficulties may also be attributable to cultural or linguistic differences.

■ In addition, some students with ADD have associated disabilities such as clinical depression, anxiety disorders, conduct disorders, and learning disabilities. It's important to be mindful of oversimplification. ADD look-alikes and those with multiple disorders may require quite different long-term intervention.

■ There is growing evidence to suggest that ADD is a physiologically based disorder characterized by an inability to attend that is inherent to the individual. Thus, students may not be able to control their behavior and/or learning.

■ Usually the behaviors of students with ADD difficulties are not malicious.

■ "Demystification" (understanding and acceptance of the individual's strengths and weaknesses and the characteristics associated with ADD) is necessary for the student, teachers, parents, and administrators to effectively meet the needs of students with ADD.

■ The primary educational approach for students with attention difficulties is to work through student strengths to assure success and build self-esteem.

■ The most important goal is student empowerment, which means that the student is able to learn and behave successfully by effectively compensating for attentional difficulties.

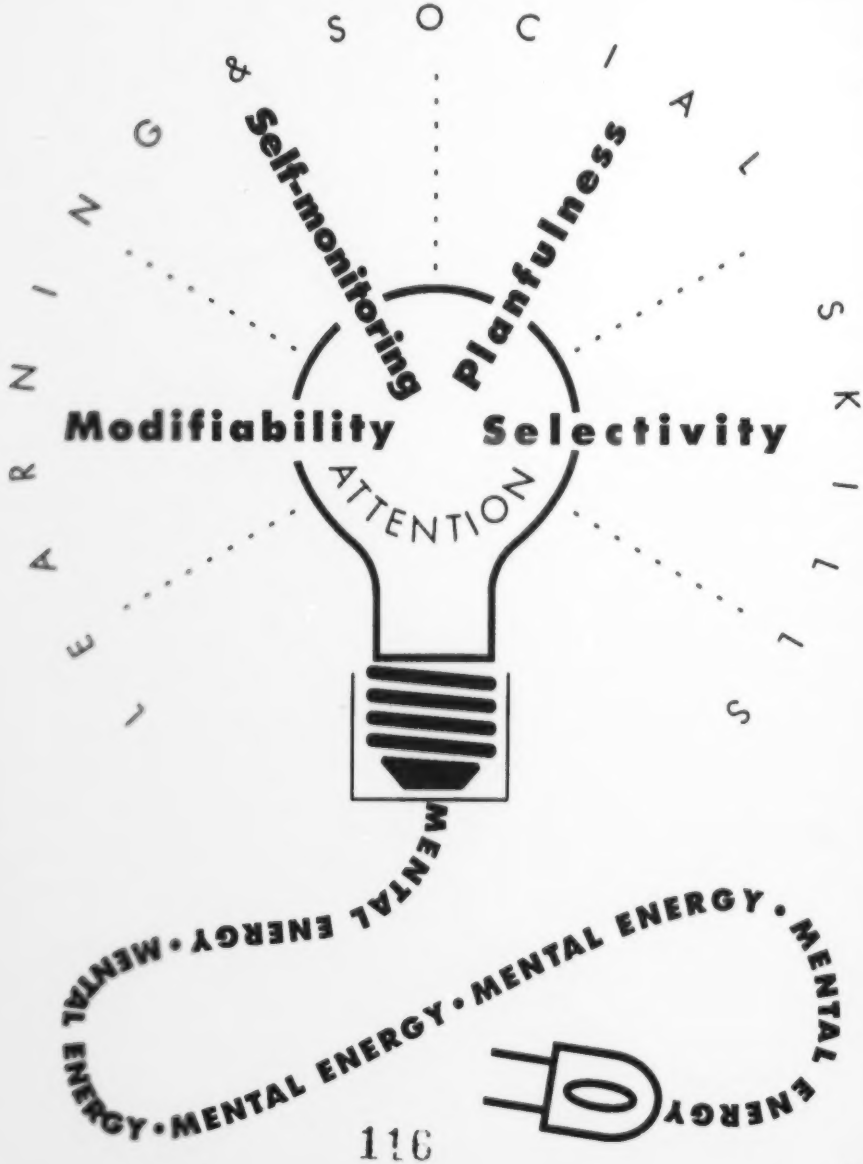
■ The most important tasks for educators involve what they think, do, and teach. These are not magical, nor do they cost additional money or take much time.

An Instructional Decision-Making Framework for Students with ADD

The instructional framework we present here reflects the concept that attention is like a light bulb which provides illumination for the acquisition of social and learning skills (Figure 10-1). The energy which lights the bulb flows through the neurological system in the form of mental energy. For students with ADD, the energy flow may be very erratic or inefficient. The light given off, therefore, is either too bright or too weak or may alternate uncontrollably between the two.

The light bulb is the mechanism which allows students to attend. It enables a student to select appropriate information from the environment, plan efficiently and effectively, monitor behavior and learning, and modify thought and action based on past information. Ineffective or inefficient mental energy is associated with inadequate attention, which in turn is related to learning and social difficulties. What educators think, do, and teach to students with ADD makes a big difference in whether students eventually learn to manage their own learning and behavior successfully. The following model provides information to help educators make effective instructional decisions.

FIGURE 10-1
The Attention Mechanism



Mental Energy

ental energy represents the "current" that flows through the neurophysiological system allowing a person to attend to a task. Mental energy is considered a key component in attention; uncontrollable fluctuations in mental energy contribute to difficulties attending. For students with ADD, the energy flow is inefficient. It is either:

- Too much,
- Not enough, or
- Erratic, inconsistent from day to day and hour to hour.

Energy flow is not under the direct control of the individual. When students have inefficient mental energy, they may do things like:

- Yawn and stretch a lot,
- Move around, squirm and fidget a lot,
- Sit in unusual positions,
- Lay all over their desk,
- Have difficulty pacing themselves,
- Have difficulty sustaining attention over time,
- Get tired easily,
- Appear to be "moody,"
- Engage in lots of drawing/doodling,
- Engage in "mindless" repetition of a specific behavior,
- Have difficulty remaining seated,
- Talk excessively,
- Have difficulty playing alone for an extended length of time, *and*
- Have trouble getting started or rush through things.

Students may say things like:

"My brain is tired."
"My brain is full."
"I'm in a hole and I can't get out!"
"Can I get a drink?"
"My pencil needs to be sharpened."
"I can't sit still and think at the same time."

ental energy

Educators help students who have difficulties related to mental energy when they:

THINK

- To get this student to change what he (she) does, I may have to change what I do.
- This student is an inefficient processor, not a disobedient kid.
- Sometimes it takes more energy to sit still than to move.
- Don't ask this student to do something I wouldn't/couldn't do as an adult.
- Don't personalize the student's anger and frustration.
- Go with the flow.
- Learn to ignore some things.
- Expect behavior problems if assignments are too long, too hard, and there is too little direct supervision.

DO

- Add novelty to repetitious tasks
- Avoid taking away those activities that provide physical activity (recess, gym).
- Use simultaneous multisensory methods and responses.
- Plan for movement with a purpose (assign a line leader, paper-passer); use activity as a reward.
- In the classroom, provide two seats for the student to move between.
- Monitor the effects of medication on behavior and learning.
- Place the student next to students who won't provoke.
- Pace the work.
- Change the pace frequently.
- Shorten the task.
- Allow the student to hold something or chew on something.
- Build in a variety of physical activities for the whole class (stretch breaks, walking drills).
- Help develop and coordinate a system for administering medication.
- Communicate with the family; they often know what works best.

TEACH STUDENT

- About ADD; demystify its characteristics, discuss strategies that work.
- Techniques to release stress and regulate energy (i.e., tapping fingers on a cloth, playing quietly with a nerf ball or clay).
- To substitute responses/behaviors while waiting, (i.e., how to choose an easier part of a task while waiting for the teacher's help.)

The Attention Mechanism

The following components of the attention mechanism are affected by inefficient and/or inconsistent mental energy. These represent the cognitive processes of attending that are important in how one thinks and acts. Focusing on these aspects of attending may help the student channel his or her mental energy in more efficient, effective ways, thus positively affecting both learning and behavior.

Selectivity

Selectivity is thought to be the ability to consistently determine and attend to critical features. It involves the ability to:

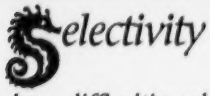
- Discriminate/determine foreground and background items,
- Attend to the important issues and ignore the unimportant,
- Appropriately group and categorize information, and
- Prioritize features along critical dimensions.

Students with difficulty in the area of selectivity may do things like:

- Ptioritize features along critical dimensions,
- Become distracted easily (by what they see, what they hear, their own bodies, their own thoughts, others, etc.),
- Become overwhelmed by choices,
- Have difficulty "changing gears" between activities,
- Be unable to generate acceptable alternatives,
- Not be able to identify the main idea/theme,
- Have difficulty attaching new concepts to old learning and difficulty with memorization of new information,
- Associate concepts/ideas in unusual ways (get "off track" easily),
- Want everything that another child has,
- Have trouble figuring out if/when they've had enough,
- Be learning all the time, but may not be learning the concept of the lesson, and
- Have difficulty sequencing or organizing written or oral expression.

Students may say things like:

"I can't decide."
"What should I do?"
"I don't understand."
"What's that?" (about a sound, light, things tangential to the lesson)
"Can I have....? "Are you gonna give me...?"
"I don't know."



Educators help students who have difficulties related to selectivity when they:

THINK

- This student needs to know *what's important* or he'll be lost in the details.
- This student needs structured choices; I need to narrow the alternatives available.
- I need to identify and prioritize the most important attributes of the task, curriculum, or situation.

DO

- Model strategies for making choices.
- Provide advanced organizers/outlines that identify key concepts.
- Repeat key concepts frequently
- Hold the student accountable for his/her knowledge of identified key concepts.
- Provide an orderly and predictable environment (i.e., develop and use classroom routines).
- Consistently use the same location for presentation of new information.
- Use visual/auditory cues to signal important information, (i.e., color-coding, verbal attending cues).
- Reduce visual distraction on worksheets and materials in the environment.
- Continually link new learning with previous learning.
- Reduce auditory stimulation (i.e., ear plugs, headphones, study carrels).
- Go over important things more than once.
- Don't overwhelm the student with too many questions too quickly.

TEACH STUDENT

- To use paraphrase strategies.
- To remove nonessential materials from his/her work surface.
- How to determine the main idea when reading.
- To use color-coding and/or underlining to highlight important information.
- To use headphones to block extraneous noise.
- To use strategies that assist selectivity (i.e. color-coding notebooks with textbook covers, labeling drawers, etc.).
- Compare and contrast strategies.
- Mapping strategies.
- To sort and order groups of things.

Planfulness

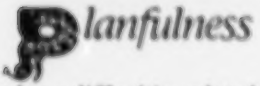
Planfulness is the ability to plan for a specific outcome (i.e., to coordinate concepts/tasks in order to achieve a goal and to use time efficiently). It is the opposite of impulsiveness.

Students who have difficulty with planfulness may do things like:

- Act before thinking,
- Have difficulty working on long-term goals,
- Tend to be disorganized,
- Have difficulty following instructions,
- Engage in social faux pas (blurt out, interrupt, butt in),
- Have difficulty waiting their turn,
- Fail to finish what they have started,
- Frequently lose things,
- Contribute to difficulties with home-school communication because nothing ever gets home, and
- Be easily overwhelmed and/or frustrated.

Students may say things like:

"I did it on accident."
"I didn't do it."
"I can't find it."
"I forgot."
"I already did it" (when it hasn't been done)
"What do I do next?"
"My dog ate it."



Planfulness

Educators help students who have difficulties related to planfulness when they:

THINK

- For this student it's not a problem of knowing what to do it's knowing *how* to do it.
- I can't assume that this student knows *how* to attack a situation or task.

DO

- Prepare the student for new situations/challenges in advance.
- Provide more supervision during unstructured and transition times.
- Break projects into small steps.
- Create checklists that outline the steps toward completion of a goal.
- Give students numerous opportunities to practice/apply new skills.
- Explicitly teach generalization of planfulness skills to new situations.
- Provide clear written expectations.
- Reinforce "preparedness" (i.e., one homework assignment excused for X days with appropriate materials).
- Provide consistent, predictable, and certain consequences, privately.
- Model decision-making strategies aloud.
- Write a schedule and timelines for assignments on the board each day.
- Provide storage trays, dividers, and notebooks.
- Tell students what to expect, help them know what to do.

TEACH STUDENT

- How to break large tasks down into smaller steps and how the smaller steps fit together to create the desired outcome/goal.
- Sequencing skills.
- Skills/strategies in organizing, planning, goal-setting.
- Time-management skills

Self-monitoring

Self-monitoring is thought to be the intrinsic ability to know what you're doing while you're doing it, the ability to monitor and regulate your emotional responses, the ability to "read" environmental cues, the ability to use objectivity and logic to purposefully control actions and reactions, and the ability to check for success. It can be thought of as those meta-awarenesses an individual needs to have in place in order to regulate his or her own behavior.

Students who have trouble with self-monitoring may do things like:

- Be unaware of mistakes,
- Tend to engage in dangerous activities without considering the consequences,
- Make frequent social faux pas,
- Make frequent social faux pas and don't correctly interpret the negative feedback that follows,
- Demonstrate an inability to fine-tune their responses to situations,
- Have difficulty interpreting the significance of a situation and therefore may overreact/under react,
- Interrupt and/or intrude on others,
- Not realize when they're off track or inappropriate,
- Not know if they've finished work or if the work is done well,
- Have difficulty controlling mood swings,
- Have limited awareness of or ownership for problems (the problem belongs to someone else),
- Have difficulty adjusting behavior to different expectations within different situations, and
- Become quickly frustrated with themselves and others (this may be expressed verbally or nonverbally as they tend to "fly off the handle" easily).

They may say things like:

"I didn't do it" when accused of something.
"But I thought I had an A."
"...But I turned in all my work."
"My brain just didn't kick in."
"I'm going to be a brain surgeon."
Or they may say nothing at all; these youngsters may not even know that they don't know something.

Self-monitoring

Educators help students who have difficulties related to self-monitoring when they:

THINK

- This student's behavior is not intended to be malicious. He/she may not even be aware of what he/she is doing.
- I need to find out if this student is aware of what he needs to know and do.
- The key here is help the student learn to think about his own knowing, thinking, and behaving.

DO

- Provide direct instruction about the specific steps and skills needed to do an assignment, complete a task, and participate in social situations.
- Model appropriate self-monitoring strategies and talk about them while doing them.
- Use an instrument to evaluate the appropriateness of the student's learning behavior response across settings, as a basis for feedback to the student.
- Function as a mirror for the child; provide straightforward and direct feedback in plain language.
- Provide clear, concise criteria.
- Provide appropriate time and opportunities for rehearsal of new skills.
- Develop a feedback loop between home and school for collaboration around common goals.
- Use a timer to teach self-monitoring and to establish start and stop times.
- Use cooperative, mixed-ability groups so that other students can model self-monitoring and self-evaluation naturally.
- Have students chart their own progress.

TEACH STUDENT

- To step back and think before acting.
- To develop self-evaluation skills using tools like checklists, progress reports.
- To verbalize aloud self-talk strategies, internalizing these into "head tapes" for self-regulation (i.e., "What have I finished? What has yet to be done?").
- Social skills: the subtleties of social communication (body language, tone of voice, facial expressions) and how to recognize/use breaks in conversation, etc.
- To look at problems from others' perspectives.
- Skills in self-advocacy, (i.e., when and how to ask for help).
- Strategies to check for goal maintenance and goal completion.
- To look at problems from others' perspectives.

Modifiability

odifiability is thought to be the capacity to learn from experience, feedback, rewards, and consequences. It is the ability to effectively use the feedback which results from past behavior(s) or anticipated future consequences to change and control current behavior(s).

Students with difficulties in modifiability may do things like:

- Be unable to generalize feedback to new situations; what was learned in situation X won't be applied to situation Y.
- Not understand their own responsibilities/contributions to the consequences of current events.
- Have difficulty following rules.
- Repeatedly engage in the same inappropriate behavior.

Insatiability, the steady state of want, the inability to be satisfied with what is available and accessible, may be a factor within the construct of modifiability. In that case, the youngster will require a more relevant and intense reinforcement system.

These students tend to say things like:

"It's not fair."
"This is stupid"
"I didn't mean to do it. It just happened."
"It's because they don't like me."
"I don't know why I did that."
"The last time I did this..."

odifiability

Educators help students who have difficulties related to modifiability when they:

THINK

- This student doesn't learn from experience easily and so will require continuous management.
- I need to act rather than react.
- Pick my battles.
- Any teacher's patience can wear thin. Be as kind to myself as I am to the kids.
- I'll have to use a very potent behavioral management system (subtleties are lost with this youngster), with novel, highly relevant, frequent, predictable, and sure consequences.
- Focus on one behavior at a time; shaping versus shape-up.
- Structure may increase the sense of security. This student may need to feel the safety of structure.
- If I phase out the reinfotcement system, it may lead to regression.

DO

- Provide students with specific behavioral/ performance guidelines so that they feel the security of structure.
- Develop a behavior management system that does not "up the ante" with progressive reinforcements (e.g., first time you give 5 points, second time 10 points).
- Frequently change rewards and make sure that the target behaviors are within the student's ability to achieve.
- Provide opportunities to role-play various choices, actions, and consequences.
- Tell the student what is expected, rather than what's not.
- Give precise, clear directions, one step at a time.
- Avoid engaging in arguments around the underlying reasons/ motivation for behavior.
- Avoid penalizing the whole class for the behavior of one child.
- Provide limited choices.
- Display classroom rules.

TEACH STUDENT

- Explicit information about rules and regulations which apply in academic and social contexts.
- Cause-effect relationships across academic and social contexts.
- To generalize results ("This occurred in situation X; how is situation Y the same/different from...?", or "What happened the last time I did...?).

*The information in this chapter was developed by the CDE ADD Curriculum Group, acknowledging the work of Drs. Melvin Levin, Michael Goldstein and Sam Goldstein.

CHAPTER 11

Systems Interventions for Schools

Our needs usually come in clusters, not in bits and pieces. The best organizations organize themselves to satisfy clusters of customer needs.
James H. Donelly, Jr., *Close to the Customer*

lthough schools don't have customers in the sense that businesses do, they are organizations and as such they need to organize themselves around clusters of student needs. Most schools will have several students with ADD (Section I, Chapter 1). By designing systems for meeting the needs of these students, strategies can be implemented efficiently and consistently. The following suggestions identify areas where schools can develop organizational systems to meet the needs of students with ADD.

Schools most effectively meet the needs of students with ADD when they design systems that provide:

Home-school-health care partnerships.

communication system developed to establish links between the home, school, and health care providers offers the opportunity for continual refinement of intervention strategies. The purpose of this communication system is to develop common expectations and consistent responses, both of which can be adjusted quickly and effectively if needed. Schools can take the leadership in developing a communication network that is efficient and effective.

A process for administering and monitoring medications specific to each school building.

n designing this system the school needs to identify who is responsible for overseeing administration of medication, monitoring the student's behavior, and communicating with parents and physicians. The system should also include how these tasks will be completed efficiently and effectively. (Section II, Chapter 5 contains specific information for developing a school medical management system.)

Freedom with boundaries.

Each school needs systems to provide options for students to move within the building when necessary (to the nurse, the secretary, the gym). In addition, the school needs a system (e.g. a class, a small group, specific activities or curriculum) to teach students to make responsible choices about when to access these options for movement.

Flexible consistency throughout the whole school.

Schools help students learn appropriate behaviors when they teach students what is appropriate. Thus, it's helpful to develop a few specific and clearly stated behavior standards and rules. The rules and consequences must be carefully taught and consistently used. The consequences should be appropriate and instructive. However, when the rules or consequences are not appropriate for a given student, alternative arrangements should be made. In this case, the expectations or standards should not be discarded, but modified or stretched to allow the student to have his/her needs met and to learn different behaviors.

In order to develop helpful alternatives or modifications for a specific student it is important to understand what motivates that student's behavior. It is then possible to develop strategies to teach the student to replace the non-functional behavior with one that is more functional (Cessna et al., 1993).

Grouping strategies focused on curricular and instructional needs.

Students' needs will be met effectively when there are opportunities for participating in various types of groups (friendship groups, social skills groups, learning style groups, reading and math skills groups). A system for offering and gaining access to these groups will assure efficiency in this complex undertaking.

Successful intervention for students with ADD takes place most frequently within the classroom. However, a few important school-wide systems make a significant contribution to the successful outcomes of students with ADD.

References

Cessna, K. K., Adams, L., Borock, J., Neel, R. S., & Swize, M. (1993). *Instructionally differentiated programming. A needs-based approach for students with behavior disorders.* Denver: Colorado Department of Education.

Additional Resources

This is only a partial listing of the many resources available about ADD. The list includes materials recommended by educators or parents because they are pragmatic and helpful. Ordering information is included for those publications that may be difficult to obtain through a bookstore.

General Resources:

Barkley, R. A. (1990). *Attention Deficit Hyperactivity Disorder: A handbook for diagnosis and treatment.* New York: Guilford.

Children with ADD: A shared responsibility. (1992). Reston, VA: Council for Exceptional Children.
[Ordering information: Council for Exceptional Children, 1920 Association Dr., Reston, VA 22091. Phone: (703) 620-3660. Members, $6.25; non members, $8.90.]

Creative approaches to ADHD: Myths and reality. (1991).
[Ordering information: University of Minnesota, ADHD Products, Professional Development and Conference Services, 315 Pillsbury Drive S.E., Minneapolis, MN 55455-0139. Cost: $3.00.]
(*This is also available in Spanish, titled *Aproximaciones creativas al ADHD: Mitos y realidad,* translated by Susan B. Hagen, 1992).

Gordon, M. *ADHD/Hyperactivity: A Consumer's Guide.* DeWitt, NY: GSI Publications.

Latham, P. S., & Latham, P. H. (1992). *Attention Deficit Disorder and the law: A guide for advocates.* Washington, DC: JKL Communications.
[Ordering information: Stonebridge Seminars, Phone: 508-836-5570.]

Lauer, J. W. (1992). *A.D.D. Attention Deficit Disorder. An aid for parents, students, school personnel, therapists & physicians.* Grand Junction, CO: PsychHealth Center.
[Ordering information: PsycHealth Center, 2004 North 12th Street, Grand Junction, CO 81501. Phone: (800) 621-0926. Cost: 75 cents.
Or Cleo Wallace Center, 8405 W. 100th Ave. Westminster, CO 80021. Phone: (303) 438-2307. Cost: $1.00. Special public school rate available.]

Wender, P. H. (1992). *The hyperactive child, adolescent and adult. Attention Deficit Disorder through the lifespan.* New York: Oxford Paperbacks.

Educators' Resources:

Braswell, L., Bloomquist, M., & Pederson, S. (1991). *ADHD. A guide to understanding and helping children with Attention Deficit Hyperactivity Disorder in school settings.* Minneapolis: University of Minnesota.
(This is also available in Spanish, titled *Guia para entender y ayudar en las escuela a los ninos con sindrome de difiencia attencional e hiperactividad,* translated by Susan B. Hagen, 1992.)
[Ordering information: Department of Professional Development, University of Minnesota, 204 Nolte Center, 315 Pillsbury Drive SE, Minneapolis, MN 55455-1039; cost $10.00.]

Fowler, M. (1992). *Ch.A.D.D. Educators manual.* Fairfax, VA.: CH.A.D.D.
[Ordering information: Caset Associates, 3927 Old Lee Highway, Fairfax, VA 22030 or phone (800) 545-5583. Cost $10.00 plus $2.00 shipping and handling.]

Goldstein, S., & Goldstein, M. (1987). *A teacher's guide: Attention Deficit Hyperactivity Disorder in children.* Salt Lake City: Neurology, Learning & Behavior Center.
(Ordering information: 230 South 500 East, Suite 100, Salt Lake City, UT 84102. $3.50 per guide.]

McCarney, S. B. (1989). *The Attention Deficit Disorders Intervention Manual.* Columbia, MO: Hawthorne Education Services, Inc.

Parker, H. C. (1988). *The ADD hyperactivity workbook.* Plantation, FL: Impact Publications.

Rief, S. (1993). *How to reach and teach ADD/ADHD children.* West Nyack, NY: Center for Applied Research in Education.

Parents' Resources:

Fowler, M. (1993). *Maybe you know my kid.* Carol Publishing Group. Sales & Distribution Offices. 1120 Enterprise Avenue, Secaucus, NJ 07094.

Goldstein, S., & Goldstein, M. (1989). *A parent's guide: Attention Deficit Hyperactivity Disorder in children (2nd edition).* Salt Lake City: Neurology, Learning & Behavior Center.
[Ordering information: 230 South 500 East, Suite 100, Salt Lake City, UT 84102. Cost: $3.50]

Goldstein, S. & Goldstein, M. (1992). *Hyperactivity: Why won't my child pay attention.* New York: John Wiley & Sons, Inc., Professional and Trade Division.

Ingersoll, B. (1988). *Your hyperactive child: A parents' guide to coping with ADD.* New York: Doubleday.

McCarney, S. B., & Bauer, A. M. (1990). *The parent's guide to Attention Deficit Disorders.* Columbia, MO: Hawthorne Education Services, Inc.

Students' Resources:

Gehret, J. (1992). *Eagle eyes: A child's view of ADD.* Fairport, NY: Verbal Images Press.

Gordon, M. (1991). *Jumpin' Johnny get back to work! A child's guide to ADHD/hyperactivity.* DeWitt, NY: GSI Publications.

Gordon, M. (1992). *My brother's a world-class pain... A siblings' guide to ADHD/hyperactivity.* DeWitt, NY: GSI Publications.

Gordon, M. (1993). *I would if I could: A teenager's guide to ADHD/hyperactivity.* DeWitt, NY: GSI Publications.

Levin, M. (1992). *All kinds of minds.* Cambridge, MA: Educational Publishing Services.

Levin, Melvin. (1989). *Keeping ahead in school.* Cambridge, MA: Educational Publishing Services.

Moss, D. (1988). *Shelley the hyperactive turtle.* Rockville, MD: Woodbine House, Inc.

Parker, R. N. (1992). *Making the grade: An adolescent's struggle with ADD.* Plantation, FL: Impact Publications, Inc.

Quinn, P., & Stern, J. (1992). *Putting on the brakes: Young people's guide to understanding Attention Deficit Hyperactivity Disorder (ADHD).* New York: Magination Press.

Early Childhood Resources:

Jones, C. B. (1991). *Sourcebook for children with Attention Deficit Disorder. A management guide for early childhood professionals and parents.* Tucson, AZ: Communication Skill Builders. [Ordering information: Communication Skill Builders, 3830 E. Bellvue, P.O. Box 42050, Tucson, AZ 85733. Phone (602) 323-7500. Cost: $35.00.]

Videotapes:

A.D.D. Stepping out of the dark. (1993).
[Ordering information: One Anna Two Productions. P.O. Box 622, New Paltz, NY 12561.]

Creative approaches to ADHD: Active partnerships.
Two versions of this tape are available. A 50-minute version provides information about assessment and treatment and a 16-minute version provides a briefer description. [Ordering information: University of Minnesota, ADHD Products, Professional Development and Conference Services, 315 Pillsbury Drive S.E., Minneapolis, MN 55455-0139. Cost: $39.95 for the long version; $24.95 for the shorter one.]

Goldstein, S. (1989). *Why won't my child pay attention?*
[Ordering information: Neurology, Learning and Behavior Center, 230 South 500 East, Suite 100, Salt Lake City, UT, 84102. Cost: $29.95 + $3.50 shipping and handling.]

Goldstein, S. (1990). *Educating inattentive children.*
[Ordering information: Neurology, Learning and Behavior Center, 230 South 500 East, Suite 100, Salt Lake City, UT, 84102. Cost: $89.95 +$3.50 shipping and handling.]

Organizations:

ADDAG. (Attention Deficit Disorder Advocacy Group).
A Colorado support group for families affected by ADD. Address: 8091 South Ireland Way, Aurora, CO 80016. Phone: (303) 690-7548.

CH.A.D.D. (Children with Attention Deficit Disorders).
A national organization that provides information and support related to ADD. Address: 499 Northwest 70th Avenue, Suite 308, Plantation, FL 33317. Phone (305) 587-3700.

Colorado Branch of the Orten Dyslexia Society
This organization focuses on issues and strategies related to reading and writing difficulties. Address: P.O. Box 102092, Denver, CO 80250. Phone: (303) 721-9425.

Colorado Tourettes Syndrome Association
An advocacy and support organization focusing on Tourettes Syndrome. Address: 789 Sherman Street, Suite 315, Denver, CO 80203. Phone: (303) 733-7864.

Learning Disabilities Association of Colorado

This is an organization which focuses on learning disabilities. Address: 1045 Lincoln Street, Suite 106, Denver, CO 80203. Phone: (303) 894-0992.

The Legal Center Serving People with Disabilities.

This is an organization that offers legal assistance to people with disabilities. Address: 455 Sherman, Suite 130, Denver, CO 80201. Phone: (303) 722-0300

The Mental Health Association of Colorado

This organization provides family empowerment services statewide for parents of children and adolescents with emotional or behavioral disorders or mental illness. The services include support networks, parent training and information and referral services. Address: 1291 N. Speer, Denver, CO 80204. Phone: (303) 595-3500 or (800) 456-3249.

Parents Encouraging Parents (PEP)

The purpose of this group is to bring parents of students with disabilities together, giving them the opportunity to share ideas and common concerns and obtain information relating to parenting their children. Three statewide conferences are held in various locations throughout the state. For further information contact Cyndy and John Burd, 96 Gordon Lane, Castle Rock, Colorado 80104. Phone: (303) 6888-4756.

PEAK Parent Center

PEAK provides training and help to families of children with disabilities and also to the educators, doctors, and others who work with them. They also provide a calendar of parent support activities. Address: 6055 Lehman Drive, Suite 101, Colorado Springs, CO 80918. Phone: (800) 426-2466 or (719) 531-9400.

APPENDIX A

Guidelines for Identification for Special Education

PREPARED BY THE COLORADO SOCIETY OF SCHOOL PSYCHOLOGISTS

Guidelines for the Assessment of Attention Deficit/ Hyperactivity Disorder (ADHD) as a Physical Disability in the Educational Setting

FALL, 1993

I. *Does the child have the condition, "school-identified ADHD?"*

ALL OF THE FOLLOWING MUST BE TRUE:

A. The child meets the DSM-III-R criteria for ADHD (or DSM-IV criteria when they become available):

1. Eight of fourteen characteristics of ADHD,
2. Onset of attention problems before the age of 7,
3. Existence of attention problems for problems for 6 months,
4. Attention problems which are outside developmental expectations for the student's age (or mental age).

B. The child's problems cannot be attributed primarily to:

1. A learning disability (e.g., auditory processing),
2. An emotional disorder (e.g., anxiety, bipolar disorder),
3. An adjustment disorder (e.g., recent family change),
4. A medical condition (e.g., medication side effect),
5. A pervasive developmental disorder (e.g., autism).

C. The child's attention problems exist across a variety of structured and unstructured settings.

II. *Does the condition, "school-identified ADHD" have a significant impact on the child's educational functioning?*

ONE OF THE FOLLOWING MUST BE TRUE:

A. The child's attention problems impair academic functioning when compared to peers as demonstrated by, for example:

1. Low work production,
2. Problems completing assignments,
3. Poor planning and organizational skills,
4. Inconsistent retention of format,
5. Persistently poor or inconsistent grades,
6. Difficulty following directions.

B. The child's attention problems impair social or behavioral functioning as demonstrated by:

1. Disruptive behavior in the classroom attributed to poor impulse control,
2. Repeated disciplinary involvement in the school setting,
3. Poor grades for citizenship,
4. Low self-esteem,
5. Poor peer relationships due to difficulty reading and responding to social cues.

THE FOLLOWING MUST ALSO BE TRUE:

C. A variety of intervention has been tried in the regular education setting and the student remains unable to participate effectively in the educational process.

Assessment Questions

I. *Does the student have the condition, "school-identified ADHD?"*

A. Does the student meet the DSM-III-R (or DSM-IV) criteria for ADHD?

1. Eight of 14 characteristics?
2. Onset of attentional problems before age 7?
3. Duration of attention problems for 6 months?
4. Attention problems in excess of developmental expectations for the student's age (or mental age)?

POSSIBLE PROCEDURES OR INSTRUMENTS TO USE
(INSTRUMENTS REFERENCED AT THE END ARE MARKED BY *)

- Interview parent regarding onset and duration of student's attention problems.
- Distribute standardized, norm-referenced behavioral checklists (such as *Achenbach, *Conners, *ACTeRS, or *ADDES) to parents and teachers in both structured and unstructured settings. Consider the use of a broad spectrum measure such as the Achenbach, before the use of more specific measures.

B. Can this student's difficulties be explained by another primary disorder?

1. Does the student have learning disabilities?

POSSIBLE PROCEDURES OR INSTRUMENTS TO USE

- Review student's school records, noting grades, group achievement test scores, prior comments about behavior.
- Interview parent regarding history of learning disabilities in the family.
- Observe student in the classroom setting to determine whether attention problems vary as a function of mode of instruction.
- Determine whether a full special education assessment for learning disabilities is warranted.

2. Does the student have an emotional disorder?

Possible Procedures or Instruments to use
(Instruments Referenced at the End are Marked by *)

- Interview student.
- Distribute broad spectrum behavioral checklist such as the Personality Inventory for Children or the *Achenbach. Review scales indicating emotional difficulties.
- Interview parent regarding history of mental illness in family.
- Determine whether full special educational evaluation for emotional disorder is warranted.

3. Can this student's difficulties be explained by an adjustment reaction?

Possible Procedures or Instruments to use

- Review school records to assess, for example, the number of schools the child has attended.
- Interview parent and student to identify recent environmental stressors.

4. Can this student's difficulties be explained by a medical condition?

- Interview parent to determine whether student is taking medications or is under the care of a physician.

C. Do the student's attention problems exist across a variety of settings?

Possible Procedures or Instruments to use
(Instruments Referenced at the End are Marked by *)

- Observe the student (and randomly chosen control) in structured and unstructured settings to determine the percent of on-task and off-task behavior.
- Use the *Home Situations Questionnaire Revised and the *School Situations Questionnaire-Revised to identify settings which are the most problematic.

II. *Does the condition, "school-identified ADHD," have a significant impact on the student's educational functioning?*

A. Is the student's academic functioning impaired by his/her attention problems?

Possible Procedures or Instruments to use
(Instruments Referenced at the End are Marked by *)

- Assess work production (using, for example, the *Academic Performance Rating Scale): review grades; evaluate organizational skills (using for example, desk, locker, notebook, or backpack as indicators).

B. Is the student's social or behavioral functioning impaired by his/her attention problems?

Possible Procedures or Instruments to use

- Determine extent of social impairment using results of behavioral checklists and parent, student, teacher reports.
- Evaluate social self-esteem using, for example, a measure such as the Self-Esteem Index.
- Determine intensity of behavior problems using, for example, estimates of disruptive behavior in the classroom, number of disciplinary referrals, extent of police involvement, and results of behavioral checklists.

C. Have a variety of interventions been attempted in the regular education setting?

Possible Procedures or Instruments to use

- Use a "pre-referral" or teacher intervention checklist to document the interventions that have been attempted in the mainstream setting, including for example, the following: modification of homework, selection of modified textbooks and workbooks, use of a structured learning environment, frequent repetition of directions and assignments, use of multi-modal teaching techniques, use of tape records and word processors, and modification of test delivery.

References

Academic Performance Rating Scale

Developers: G.J. DuPaul, M. Rappport, and L.M. Perriclo. Available in: Barkley, R. A. (1991). *Attention-Deficit Hyperactivity Disorder: A clinical workbook*. New York: The Guilford Press.

Achenbach

Child Behavior Checklist (CBCL)
Teacher Report Form (TRF)
Youth Self-Report (YSR)

Developers: T.M. Achenbach and C.S. Edelbrook. Obtain from: Thomas Achenbach, Ph.D., Department of Psychiatry, University of Vermont, Burlington, VT 05401

ACTeRS: ADD-H Comprehensive Teacher Rating Scale

Developers: R.K. Ullmann, E. Sleator, R.L. Sprague. Obtain from: Rina Ullmann, Ph.D., Institute for Child Behavior and Development, 51 Gerty Drive, Champaign, IL 61820

ADDES: Attention Deficit Disorders Scale

Home Version
School Version

Developer: S.B. McCarney. Obtain from: Hawthorne Education Services, P.O. Box 7570, Columbia, Missouri 65205 (1-800-542-1673)

Conners

Conners Teacher Rating Scale (CTRS-28)
Conners Parent Rating Scale (CPRS-48)

Obtain in a "quick score" format from: Multi-Health Systems, Inc., 908 Niagara Falls Boulevard, North Tonawanda, NY 14120 (800-268-6011)

Home Situations Questionnaire-Revised
School Situations Questionnaire-Revised

Developer: G.J. DuPaul. Available in: Barkley, R. A. (1991). *Attention-Deficit Hyperactivity Disorder: A clinical workbook* . New York: The Guilford Press.

Ingersoll, B. (1988). *Your hyperactive child: A parents' guide to coping with ADD*. New York: Doubleday.

McCarney, S. B., & Bauer, A. M. (1990). *The parent's guide to Attention Deficit Disorders*. Columbia, MO: Hawthorne Education Services, Inc.

111

APPENDIX B

Colorado Department of Health County Nursing Service

Neurology Clinics

The following are sites for neurology clinics sponsored by Handicapped Childrens' Program (HCP). School personnel should contact the agency and ask for the nurse who is responsible for the HCP program.

Alamosa	HCP-CSN SLV Regional Office 1570 12th St. Alamosa, CO 81101 719-589-4313
Canon City	Fremont County Nursing Service 615 Macon Ave. Canon City, CO 81212 719-275-1510
Colorado Springs	El Paso County Health Department 301 So. Union Blvd. Colorado Springs, CO 80810 719-578-3199
Cortez	Montezuma County Nursing Service 106 West North Street Cortez, CO 81321 303-565-3056
Craig	Moffat County Nursing Service 793 Russell St. Craig, CO 81625 303-824-8233
Delta	Delta County Health Department 103 West 11th St. Delta, CO 81486 303-874-9715

Denver	The Children's Hospital 1056 East 19th Ave. Norma Patterson HCP Denver, CO 80215 303-692-2393
Durango	San Juan Basin Health Department 3803 Main St. Durango, CO 81301 303-247-5702
Eagle	Eagle County Nursing Service Courthouse 500 Broadway Eagle, CO 81531 303-945-8815
Fort Collins	Larimer County Health Department 1525 Blue Spruce Dr. Fort Collins, CO 80524 303-498-6711
Glenwood Springs	Garfield County Nursing Service 109 8th St., Suite 202 Glenwood Springs, CO 81601
Grand Junction	Mesa County Health Department 515 Patterson Road Grand Junction, CO 81501 303-248-6948
Greeley	Weld County Health Department 1517 16th Ave., Ct. Greeley, CO 80631 303-353-0586
Haxtun	NE BOCES 301 W. Powell, P.O. Box 98 Haxtun, Co 80731 303-744-5152
La Junta	Otero County Health Department County Courthouse La Junta, CO 81050 719-384-2584
Lamar	Prowers County Nursing Service 1001 South Main St. Lamar, CO 81052 719-336-8721

Las Animas	Bent County Nursing Service 456 Carson St. Las Animas, CO 81054 719-456-0517
Leadville	Lake County Nursing Service 112 W. 5th St. Leadville, CO 80461 719-486-0118
Montrose	Montrose County Nursing Service Montrose, CO 81402 303-249-6603
Pueblo	Pueblo City-County Health Department 151 Central Main Street Pueblo, CO 81003 719-544-8376
Rocky Ford	Otero County Health Department County Courthouse La Junta, CO 81050 719-384-2584
Steamboat Springs	Routt County Nursing Service County Courthouse Annex Steamboat Springs, CO 80477 303-879-1632
Trinidad	Las Animas-Huerfano Counties District Health Department 412 Benedicta Ave. Trinidad, CO 81082 719-846-2213

Pediatric Evaluation Clinics

ediatric Evaluation Clinics sponsored by the Handicapped Children's Program (HCP) are located in the following sites. Again, the school personnel should contact the agency and ask for the nurse who is responsible for the Pediatric Evaluation Clinic.

Craig	Moffat County Nursing Service 793 Russell Street Craig, CO 81625 303-824-8233
La Junta	Otero County Health Department County Courthouse La Junta, CO 81050 719-384-2584
Lamar	Prowers County Nursing Service 1001 South Main Street Lamar, CO 81502 719-336-8721
Steamboat Springs	Routt County Nursing Service County Courthouse Annex Steamboat Springs, CO 80477 303-879-1632

Developmental Evaluation Clinics

Alamosa	San Luis Developmental Evaluation Clinic 1570 - 12th Street Alamosa, CO 81101 Phone # 719-589-4313 Fax # 719-589-2073 *Medicaid Provider # 04002085* Clinics: 4 times per year Service Area: Saguache, Rio Grande, Conejos, Alamosa, Costilla, and Mineral counties

Boulder	Mapleton Center for Rehabilitation Pediatrics Rehabilitation Department P.O. Box 9130 Boulder, CO 80301-9130 Phone # 303-441-9432 *Medicaid Provider #05027008* Clinics: 10 times per year Service Area: Boulder County
Canon City	Upper Arkansas D & E Clinic Fremont County Nursing Service 615 Macon Canon City, CO 81212 Phone # 719-275-1626 Fax # 719-275-7626 *Medicaid Provider # 04008058* Clinics: 4 times a year Service Area: Chaffee, Custer, and Fremont counties
Colorado Springs	Child Development Center of Colorado Springs, P.C. P.O Box 25148 Colorado Springs, CO 80936 Phone # 719-574-8300 Fax # 719-547-9547 *Medicaid Provider # 04002762* Clinics: Ongoing Service Area: El Paso County
Denver	John F. Kennedy Child Development Center Box C-234, UCHSC 4200 E. 9th Avenue Denver, CO 80262 Phone # 303-270-7224 Fax # 303-270-6844 *Medicaid Provider #04002135* Clinics: Per clinic, individually scheduled Service Area: Colorado
Denver	Sewall Child Development Center 1360 Vine Street Denver, CO 80206 Phone # 399-1800 Fax # 399-1419 *Medicaid Provider #04001277* Clinics: Every Friday as needed Service Area: Metropolitan area, referrals from outlying areas

Durango	Children's Developmental Evaluation Clinic San Juan Basin Health Department P.O. Box 140 Durango, CO 81301 Phone # 303-247-5702 Fax # 303-247-9126 *Medicaid Provider # 04402150* Clinics: 4 times per year Service Area: La Plata, San Juan, Dolores, Montezuma, and Archuleta counties
Grand Junction	Mesa County Valley School District Clinic C/o Emerson School 930 Ute Avenue Grand Junction, CO 81501 Phone # 303-243-5236 Fax # 303-243-1943 *Medicaid Provider #4002929* Clinics: 3 times per year Service Area: Mesa
Greeley	Centennial Development Services, Inc. 3819 St. Vrain Greeley, CO 80620 Phone # 303-339-5360 Fax # 303-330-2261 *Medicaid Provider #04004123* Clinics: Ongoing Service Area: Weld County
Meeker	Developmental & Evaluation Clinic of Northwest Colorado P.O. Box 2114 Meeker, CO 81641 Phone # 303-878-3196 *Medicaid Provider # 04008330* Clinics: 2 to 3 times per year Service Area: Rio Blanco, Grand, Jackson, Moffat, and Routt counties

Rocky Ford

Arkansas Valley Developmental Evaluation Clinic
Otero County Health Department, Rocky Ford Branch
811 South 13th Street
Rocky Ford, CO 81607
Phone # 719-254-3384 — Rocky Ford
Phone # 719-384-2584 — La Junta
Fax # 719-384-4221
Clinics: 3 times per year
Service Area: Otero and Crowley counties

Silt

Two Rivers Developmental Clinic
0361 Vista Drive
Silt, CO 81652
Phone # 303-876-5768
Fax # 303-876-5492
Medicaid Provider #04003885
Clinics: 3 to 4 times per year
Service Area: Garfield, Pitkin, and Eagle counties

Colorado State Board of Education

Sybil S. Downing, Chairman
Member at Large
Boulder

Patricia M. Hayes, Vice Chairman
Sixth Congressional District
Englewood

Gladys S. Eddy
Fourth Congressional District
Fort Collins

Royce D. Forsyth
First Congressional District
Denver

Thomas M. Howerton
Fifth Congressional District
Colorado Springs

Ed Lyell
Second Congressional District
Broomfield

Hazel F. Petrocco
Third Congressional District
Pueblo

cde

Colorado Department of Education

William T. Randall
Commissioner of Education
State of Colorado

Special Education Services Unit

Brian McNulty
Executive Director of Special Services

Fred Smokoski
Director of Special Education

Attention Deficit Disorders

Young children and students with Attention Deficit Disorders pose unique and sometimes very frustrating challenges for those of us in schools and early childhood settings. Inside the covers of this book you will find information to help teachers, administrators and support services personnel to be able to think, act and teach in ways that lead to success for students with ADD. Written by educators, parents and health care providers in Colorado, the ideas presented provide a practical framework with do-able strategies you can use today.

Read this book and see why people are saying:

"A real contribution to the field!"
Pamela Murray
President, Attention Deficit Disorder Advocacy Group

"Can't wait to share it with educators in other states."
Jack Rudio
Program Specialist, Mountain Plains Regional Resource Center

"Please send me a copy quickly!"
Parent of a child with ADD

"I need HELP! Send the book."
School administrator

Additional copies are available from:

Mountain Plains Regional Resource Center
Utah State University
1780 North Research Parkway Ste. 112

Logan Utah 84321
1-(801)-752-0238

$8.50 (covers shipping and handling)

BEST COPY AVAILABLE